Check your understanding

Answers to these review questions are upside down at the bottom of this page.

1. Jane sees a range of secondhand helmets for sale at a garage sale. They all look new and some are in bright colours. She should:
   A. choose the one with the brightest colour and a full visor
   B. not buy a secondhand helmet as she may be unable to see any damage to it
   C. not buy a secondhand helmet without speaking to the previous owner

2. The main reason for wearing clothing designed for motorcycling is that it:
   A. protects you from the weather
   B. helps protect you in a fall
   C. both of the above

3. Shane has just passed his motorcycle learner permit and has the chance to ride his friend’s new motorcycle. Before he rides he should:
   A. check that the fuel tap is on reserve
   B. reconsider and choose not to ride an unfamiliar bike
   C. ride with his friend as a pillion passenger

ANSWERS 1B 2C 3B
No matter what bike you choose to ride it needs to be set up to suit you. Making the right adjustments from the start will not only make your bike more comfortable to ride, it will also improve your ability to control the bike. In addition to these adjustments there are a number of important checks to make every time before you ride.
A simple guide to the parts of a motorcycle

- Front brake lever - the clutch lever is on the left side
- Throttle
- Speedometer
- Turn indicator lamp
- Front brake disc
- Front brake calliper
- Gearshift lever - rear brake pedal is on the right side
- Shock absorber
- Rear brake disc - on right side
- Swingarm
- Footpeg
- Chain

Check the owner’s manual for information about your bike.
Setting up for yourself and your bike

You and your bike are partners out there on the road, and like any partners you should make sure that you can get along. This will require a bit of adjustment from each of you. Some of these comments will not apply to scooters, because they are built differently.

Personalise your bike

- Some bikes allow you to adjust the height of the seat. Set it so your feet are comfortably flat on the ground when you are sitting on the bike.
- Adjust the gear and rear brake levers up or down so that they are within comfortable reach of your feet. Remember that you need to move the gear lever up and down, not just down like the brake lever. If you are not sure how to do this, ask your Accredited Motorcycle Trainer or bike shop for advice.
- If the handlebars are adjustable, set them so they are comfortable. If you can’t get them comfortable, consider replacing them or changing the clamps that hold them.
- If your bike has adjustable clutch and front brake levers, set them so that they are in easy reach of your fingers.
Set yourself up

- Your posture should be comfortable while allowing good control of the bike. Keep your head up and your line of sight level with the road. Your arms should not be feeling too much strain from holding up your body.

- Sit close enough to the handlebars so you can reach them with your arms slightly bent. You should be able to turn the bars without stretching.

- Hold the handgrips firmly and keep your wrists low with the knuckles at the highest point. This gives you good control of the throttle while making it easy to reach the clutch and brake levers.

- To maintain posture while braking and absorb shocks from the front end of the bike, your elbows should be slightly bent and tucked in.

- Grasp the fuel tank firmly with your knees to balance the bike and keep control when turning, slowing or speeding up.

- Keep your feet on the footpegs while the bike is moving, ready to use the foot controls.

Tip

Your Accredited Motorcycle Trainer is the best person to teach you the basics of starting off, using the gears, braking, cornering and turning. If you are uncertain about anything, make sure you ask.

Checks to make before each ride

You should check your bike before each ride. Your safety begins with your machine.

Controls

- Brakes should work smoothly. The front and rear brakes should each stop the bike when fully applied separately.

- Clutch and throttle should work smoothly and the throttle should snap shut when you let it go.

- Make sure cables are lubricated and there are no visible kinks or broken strands.
Tyres and chain

- Check tyre pressures when the tyres are cold. Correct pressures should be listed on a sticker on the bike (possibly on the swingarm) and in the owner’s manual.
- Check that the tread depth is more than 2mm all over the tyre tread. Less than this is illegal and very dangerous. The sidewalls of the tyres should be free of cracks or bumps.
- Make sure that the tyre tread is free of cuts, nails or cracks.

- Check that the chain (if the bike has one) is lubricated and the tension adjusted correctly. The owner’s manual will have details of how to do this.

Mirrors

- Clean and adjust the mirrors before you start. It is dangerous to do this when you are moving.
- You should be able to see just past your body, and as much as possible of the traffic next to you and behind you.
Lights & signals
- Check that all lights and indicators are clean and in working order. Indicators must flash and be bright enough to be seen. The headlight must be adjusted properly so that it is not too high or too low. Both low and high beams must work. Check that the tail light works, and that the brake light works when you apply the hand and foot brakes.
- Test the horn.

Fuel & oil
- Check the fuel level and don’t ride with the fuel tap on reserve until it is necessary.
- Check the oil level. The engine needs oil and could seize if the level drops too far. This will do damage to the engine and could lead to a crash.

Yourself!
- Check that you are dressed safely and properly (see pages 20-25).
- Make sure you are fit to ride and not tired (fatigued) or impaired by alcohol or drugs (see pages 15-16).
- Make sure you are in the mood and have the right attitude. Riding while angry or in any other high emotional state could make you careless or aggressive.
- Decide when to ride and when not to ride.

Checklist
Before you ride each time check:
- brakes are working
- clutch and throttle are working smoothly
- cables are lubricated
- tyre pressures are correct and look for tyre wear
- chain is lubricated and adjusted
- lights, indicators and horn are working
- mirrors are clean and adjusted
- there is enough fuel and oil
- you are dressed in the right gear
- you are fit to ride
- your mood and attitude is right to ride safely.
Check your understanding

Answers to these review questions are upside down at the bottom of this page.

1. Glenn has just taken delivery of a new motorcycle. He should:
   A. immediately take it out for a run on the open road to see how it goes
   B. adjust the controls and, if possible, handlebars and seat to suit himself
   C. take all his friends on rides to show them how much fun motorcycling is

2. Anne is trying to show her sister how to sit on the motorcycle in the correct position. She should sit:
   A. at the back of the seat with her arms straight so that she can turn quickly
   B. close to the handlebars so she can bend over the front of the bike and see the road ahead more clearly
   C. close enough to the handlebars to reach them with her arms slightly bent so she can turn without having to stretch

ANSWERS 1B 2C
Looking ahead and being seen

Being visible is not a guarantee of safety on the road, but it is the beginning of being safer. As a motorcyclist you need to do as much as you can to help make yourself be seen, but do not assume that being seen is enough. You need to be able to see clearly around you and to anticipate – think ahead and be ready to respond before things happen. Your safety is in your own hands at all times.

Remember that you are sharing the road with others – drivers, riders, pedestrians, cyclists, trucks, buses and trams. So ride cooperatively in traffic, and help everyone get to where they are going safely.
Looking ahead

A very large part of road safety is anticipation – being ready to respond to things before they happen. That’s not as hard as it sounds; in fact, it’s one of the things you learn as you go along. People who have been riding for a while become very good at it, which is one reason why they’re usually safer.

You can help yourself with this by looking ahead. Here are a few examples:

- When riding around a corner, try to position yourself on the road so you can see through the corner.
- Lean with your bike while you turn, keeping your head up and line of sight level with the road. Turn your head, look where you want to go and ride smoothly.
- When pulling out from the kerb, position your bike at an angle so you can see the traffic in both directions.
- If you are making a U-turn, have a clear view of traffic in both directions.
- At intersections, don’t count on other vehicles giving you the right of way. Approach intersections slowly and carefully.
- Watch the road ahead by looking through or over the top of other vehicles.
Good positioning

Place yourself on the road where you can see and be seen.

- Ride in the right-hand wheel track of the road, where you can be seen in both the rear vision mirror and the external mirror of the car in front of you. You can also see vehicles coming the other way, and be seen by them. Normally the road surface will be best here as well, without the oil slick that can form in the centre of the lane or the broken pavement and loose gravel at the edge of the road.

- When riding on a multi-lane road, avoid the centre lane unless there is a median strip, otherwise you will have to watch out for traffic going in both directions. Ride in the right-hand wheel track when travelling in the left lane and the left-hand wheel track if you are riding in the right lane.

- When overtaking on a multi-lane road where there is no median strip with traffic in both directions maximise the distance from other vehicles. Ride in the centre of the lane but watch out for oil slicks.

Avoid riding in blind spots

Keep a safe distance

Try to avoid riding in the centre of the lane and be aware of driver’s blind spots.

Try to maximise the distance from other vehicles. However, watch out for oil slicks if riding in the centre of a lane.
When approaching an intersection be aware of a driver’s line of sight so you can be seen. The rider here should take care, as the driver of the blue car may not be able to see him approaching.

Be aware of the driver’s line of sight. Anticipate blind spots and move to where the driver can see you.
Place yourself where you are as safe as possible

- By placing yourself where you can see and be seen, you are ‘claiming’ the lane and discouraging drivers from trying to share it. Sharing lanes is dangerous.
- Don’t ride in the blind spots that all cars have behind and beside them. Try to ride where you can see the driver’s eyes in the car’s mirror – that means the driver can see you too.
- Most crashes between a bike and a car happen at intersections, so place yourself where you can be seen and have as much room as possible to move.
- Slow down when there are cars about at intersections. Not all the drivers may be able to see you.
- Try to make eye contact with drivers coming in the opposite direction, to make sure they know you are there – but don’t rely on that! Be ready to stop or take evasive action.

Headlight

For a rider issued with a motorcycle learner permit or a restricted licence on or after 1 October 2014 the motorcycle headlight must be turned on at all times.

Riding with your headlight on during the day can greatly enhance your chances of being seen, especially on dull days, but don’t rely on the headlight alone. If you have your headlight on during the day, always use low beam.

If you are riding with your high beam on at night, you must switch to low beam when an approaching vehicle is within 200 metres or when the other vehicle’s headlight dips, whichever is sooner. When riding 200 metres or less behind another vehicle you must also dip your headlight. Use common sense, and make sure you don’t dazzle others with your headlight. See pages 60-61 for more information on riding at night.

Indicators and brake lights

Indicators and brake lights remind other road users that you are there and tell them what you are about to do. They need to be able to look ahead just as much as you do, and this way you give them the information they need.

Before you turn, change lanes or merge you must use your indicators, even if you can’t see another vehicle. Just because you don’t see another vehicle, it does not mean it isn’t there.

Send clear messages to the other traffic. Turn your indicator off when it is not needed. If you leave it on after you’ve made the turn you are giving the wrong message, which could be dangerous.

You can also make yourself more obvious to following traffic by braking gently and flashing your brake light, so they know that you are about to slow down.
**Accurate signals**

Giving the wrong signals could lead to danger.

**Sound your horn**

Sound your horn as a warning in case of danger. It may let other road users who have not seen you know that you are there. Never rely on the horn though, because it may not be heard. Be ready to get out of the way of the danger yourself.

**Be prepared to react**

Don’t rely on your horn to warn other drivers. Always be prepared to react.
Be bright...
For a rider issued with a learner permit on or after 1 October 2014 they must wear a high visibility vest or jacket (refer page 9).
Consider wearing a brightly coloured or reflective helmet and clothing. Yellow, orange and red are colours which stand out against most backgrounds. Reflective tape on your clothing or your bike works well at night, and a reflective vest is more noticeable to drivers behind you than a tail light.

...but don’t rely on drivers seeing you
No matter how visible you are on the road, there may still be drivers who simply don’t see you, or who don’t obey the road rules. You need to keep an eye out for these drivers and be ready to take care of yourself.
Check your understanding

Answers to these review questions are upside down at the bottom of this page.

1. Tom is about to pull out from the kerb to join the traffic flow. He should:
   A accelerate as quickly as possible so that he is going faster than the traffic, and it can’t catch him
   B put on his indicator because that gives him right of way
   C make sure he positions the bike so he can see the traffic in both directions before pulling out

2. The three best ways to make yourself more visible are:
   A ride with your headlight on, ride where you can be seen and wear bright clothing
   B sound your horn, keep to the left of the road and flash your headlight
   C all of the above

3. At an intersection you should:
   A change lanes to get past other vehicles
   B choose a lane position which will enable you to be seen by other drivers
   C sound your horn and then speed through as quickly as possible

ANSWERS 1C 2A 3B
Keep away from trouble 48
Keep a grip 56
Riding at night 60
Loading up 64
Riding in a group 68
Looking after your bike 72

Staying alive
Staying alive

Anticipation and skill make riding safer and enjoyable

The one thing above all others that will keep you safer on the road is your attitude. You can learn as many skills as you like, and be the most technically skilled rider around, but you can throw it all away because you can’t be bothered thinking before you act. Make no mistake about it, the road is a dangerous place, especially on a bike. Staying alive while you are out there is your responsibility.
Keep away from trouble

It might sound simple, but what can’t get at you can’t hurt you. So it makes sense to stay as far away as possible from the things that can hurt you on the road.

Survival space
The consequences of an error, yours or someone else’s, can be very serious for you as a rider.

Survival space is the best protection you can have. The more space you have around you, the more time you have to see trouble and work out a way of avoiding it. Of course, that only works if you keep your eyes open and your mind alert.

In front
This is the distance between your bike and the vehicle you are following, and you have control over it. As an inexperienced rider, you should try to keep a 3 second gap between you and the vehicle in front, so you:

- have more time to stop in an emergency
- are able to see much better over the top of and around the vehicle in front of you
- can see traffic signals, road signs and hazards well ahead
- be able to avoid potholes and other road surface hazards
- have more time to plan your response
- look, slow down and move away
- start wide and finish tight in curves.
You are also increasing the safety margin of the traffic behind you.
If you are too close, you may pay too much attention to the vehicle in front of you instead of thinking for yourself.
There are times when you will want to be even further than 3 seconds away. They include:
- poor riding conditions with reduced visibility, perhaps at night or in rain and fog
- on a wet or otherwise slippery road
- on gravel or other unpredictable road surfaces
- on a high speed road such as a main highway – almost 40% of road fatalities involving motorcyclists have occurred where the speed limit is 100 km/h
- being behind a big vehicle like a truck or bus, which is hard to see around.

Whatever you do, don’t tailgate (ride too close behind another vehicle). No matter how good your brakes are, in the real world a car can almost always out-brake an inexperienced rider in an emergency. More importantly tailgating does not allow for sufficient reaction time regardless of how good your brakes are. If you tailgate it is also harder to see obstacles or hazards on the road ahead.

**To the side**
Motorcyclists have an advantage over car drivers. You can move from one side of your lane to the other to increase distance from other vehicles. Experienced riders move lane position depending on traffic – but they always check their mirrors and do a headcheck before they do!
Consider changing your lane position when:
- You are being overtaken or passed by another vehicle. There is no point in being closer to another vehicle than you need to be. Nearly a quarter of all collisions between bikes and other vehicles involve vehicles coming from the opposite or adjacent direction.

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**Being overtaken**

**Being passed**

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Staying alive
You are near a large truck or bus. They can cause wind blasts that affect your control.

You are approaching an intersection. Place yourself where you have the best possible vision and are well clear of other traffic. About half of all collisions between bikes and cars happen at intersections. If you see a car that could turn into your path, or pull out on you, assume that it will and be ready for it.

You are passing parked cars, or vehicles waiting to turn left. Keep to the right part of the lane, away from the possibility of doors opening or pedestrians stepping out from between cars.

A driver is pulling out from the kerb. Some people don’t check properly if there is traffic coming up, and bikes can be hard to see.

A driver is pulling out from the kerb. The car might do a U-turn instead of just going straight ahead, so approach carefully. Be ready to swerve or stop and to sound your horn as a warning.

You find yourself sharing a lane. You need a full lane to yourself to be able to move safely if a problem comes up, instead of being trapped in a small space that could disappear. It is unsafe to ride between rows of cars even when one or both rows are stopped. A car door could open, a pedestrian might suddenly appear or a car might move over and close the space you need. To stop cars from sharing your lane, position yourself so you are not riding at the extreme edge of your lane.

Beware at intersections

At an intersection keep well clear of other traffic and assume cars may turn into your path.
- There is another vehicle alongside, in the next lane. Don’t ride next to other vehicles if you don’t have to – they restrict the space you have to move, and they may move over on you at any time. Move forward or drop back until you are in a free space.

- Vehicles are merging. At places such as freeway entrance ramps, make room for entering traffic by changing speed or changing lanes.

**Behind**

Unfortunately the driver behind you has more control over the space between you than you do. If someone is too close (tailgating), drop back yourself to increase the survival space between you and the car in front. Then let the tailgater overtake you. Such drivers are better in front of you, where you can keep an eye on them.

**Scanning**

This is a vital part of being safe. Experienced riders not only ride smoothly, they also continuously take in their environment. Watch someone who has been riding for a few years and you will see that they scan – their heads and eyes move constantly. Instead of focusing on any one part of the road they are looking up close, then far away, then to the right and the left – they are taking in the entire road environment without ever losing sight of the vital stretch right in front of them.

**Passing a car**

Increase the distance between your motorcycle and the merging vehicle.

Scanning does not necessarily mean looking directly at everything. You can see out of the corner of your eye and as your eyes pass over things. You can be aware of the footpath, of the behaviour of someone in a parked car nearby and of the driver of a car four vehicles in front of you, and you can do it all without being distracted. Sort the information in order of its importance to you. It takes practice, but it’s worth learning.
Use the height advantage you have on a motorcycle and look over cars in front of you. Use that advantage to see what you’re getting into. Scanning also gives you a chance to check the road surface well ahead for potholes, loose gravel and other potential hazards.

Combine a glance in the mirrors and headchecks to give you a picture of what’s happening behind you. Do this often and quickly, because what’s behind you is part of your environment too, but always get your eyes back to the front quickly. Check the mirrors even when you are stopped, because you may need to get out of someone’s way.

When merging, changing lanes or leaving the kerb always do a headcheck of the lane next to you and your own lane, before you move. Another vehicle may be headed for your space, and it may not be visible in your mirrors.

**Tip**

A headcheck involves looking over your shoulder to see things behind and to the side. But remember, don’t take your eyes off the road ahead for more than a second.
Planning

There are two kinds of planning you can do – tactical and strategic.

Tactical planning involves looking ahead as you ride to see potential trouble, and deciding what to do about it before you get there. It can help you to avoid emergency stops and wild swerves. Experienced riders know that other road users make mistakes and try to plan their reaction before it happens. It is also good planning to be sure how you will get back into your lane before overtaking, and how you will complete complicated turns.

Strategic planning is done before you leave on your ride. Consider the alternative ways of getting to where you want to go, and pick the safest and easiest. If you are on a small, low capacity bike avoid freeways; if you are on a big tourer, stay out of heavy and congested traffic; and so on.

Another really good plan to stay out of trouble is to not ride with other riders who have no respect for their own safety. If someone rides irresponsibly on a bike, you don’t want to be there (or even be in the way) when something goes wrong.

The 3 second gap

Measuring a safe following distance is simple.

When the vehicle ahead of you passes a tree, a power pole or something similar, use that as a reference point and start counting – “one thousand and one, one thousand and two, one thousand and three”.

If you get to the tree or other reference point before you finish counting, you are too close. After a while you will get good at estimating this gap, although you should still check yourself every now and then.

Try to keep a 3 second gap between you and the vehicle ahead.
Check your understanding

Answers to these review questions are upside down at the bottom of the next page.

1. The gap between your motorcycle and the vehicle ahead, in good conditions, should be at least:
   A 2 seconds
   B 3 seconds
   C 4 seconds

2. Peter is riding along a freeway in the left lane. Cars are moving on to the freeway from the entrance ramp. He should:
   A accelerate to get ahead of them
   B continue to travel at the same pace and position as it is their responsibility to merge into the traffic safely
   C adjust his speed to increase the distance between his bike and the merging traffic

3. When you are being followed too closely you should:
   A travel faster to increase the distance between you and the tailgater
   B brake several times to let the driver know that you think he is driving dangerously
   C increase the space in front of your motorcycle so you have more time to react, if you need to

4. Scanning involves:
   A studying the movements of the car ahead of you
   B looking at the road just ahead of you
   C moving your eyes from side to side to look at the whole road scene
5. Before changing lanes always do a final:
   A sound of your horn
   B headcheck
   C flash of your brake lights

6. To prevent other drivers sharing your lane you should:
   A ride to the right of your lane
   B ride to the left of your lane
   C not ride at the extreme sides of your lane

ANSWERS 1B 2C 3C 4C 5B 6C
Keep a grip

Consider that the two patches of rubber connecting you to the road surface are about the same size as the palm of your hand. Make sure they can do their job. There are several things that will make it harder for them.

The risk of losing control of a bike can increase because of deterioration in the road surface, such as potholes, wheel ruts or grooves, slippery surfaces and loose gravel.

Just under half of bike casualty crashes involve loss of control.

Always try to be aware of the road surface conditions, and if necessary adjust your riding technique and speed to suit the conditions.

Tip

Loose dirt and gravel collect at the edge of the road, so try to stay away from there.
Slippery roads
Many things can make the road surface slippery, and you need to keep these in mind. This will become automatic as you gather experience. Here are some common slippery situations you may find.

- Sealed roads when they’re wet, especially just after it starts to rain and before the oil and muck on the road are washed away.

- Painted lane and other markings, as well as steel and other naturally smooth surfaces – including manhole covers, tram lines, bridge expansion joints and even smooth bitumen used to repair roads – at any time, and even worse when they are wet.

- Unmade and gravel roads, and patches of sand or gravel that have collected on sealed roads.

- Mud, snow and ice, including black ice.

- Grease deposited in the middle of lanes, and oil or diesel spills.

Try to avoid slippery patches. If you can’t reduce speed before you get to them, ride as upright as you can once you reach them and try to avoid turning, changing gear or speed, or using the brakes. If you need to brake, apply the front brake first then the rear brake. The important thing is to be smooth.

Bumpy roads and potholes
On rough roads, keep your speed down. That does three things – it gives you time to avoid the worst bumps or holes, reduces road shocks and gives your bike’s suspension time to work. Remember that bumps can affect your steering as well as the suspension, so take it easy.
Grooved roads
Every now and then you will come to a road that has had grooves cut into it. This is usually to help make it less slippery in the wet – there’s a warning already! Grooves are rarely a problem if you stay relaxed, maintain your speed and direction and just keep riding. Try to slow down as much as is safe before you get to the grooving.

Sloping roads
On a high crowned road, where the centre is much higher than the sides, the slope of the road will try to push you to the edge. This can be a worry especially in right-hand curves. Be aware of it, slow down and maintain your position on the road.

Tram tracks and railway lines
Avoid riding on or across tram or railway tracks. They are steel, and therefore slippery, and they can also have deep ridges of road material alongside them. Don’t follow the rails because your bike’s tyres could become trapped in these grooves.

When you cross tracks, remember these things:
- look where you want to go, not where the tracks are going
- avoid places where tracks cross each other

Crossing tram tracks

Cross tram or train tracks as close as possible to a right angle and keep your bike in an upright position.

- cross the tracks as close to a right angle as possible, but make sure you don’t risk running into other traffic
- keep your bike upright
- maintain your speed and cross smoothly without braking or accelerating
- if possible, complete any turn before you reach the tracks.