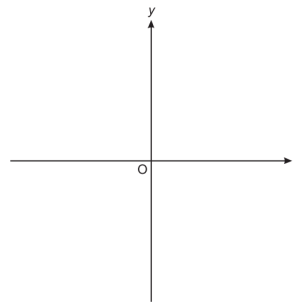




Sketch

$$y = 2^x$$

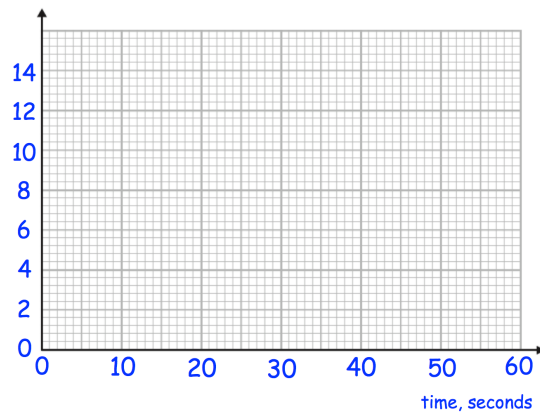


A remote control car drives in a straight line.

It starts from rest and travels with constant acceleration for 20 seconds reaching a velocity of 12m/s.
It then travels at a constant speed for 10 seconds.
It then slows down with constant deceleration of 1.5m/s².

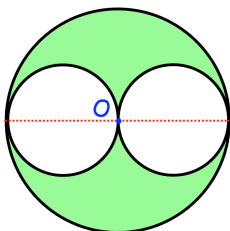
Draw a velocity-time graph and work out the total distance travelled.

Velocity, m/s



The line AB has equation $5x + 2y = 4$

Find the equation of the line parallel to AB that passes through the point (4, -1)



Two identical small circles are drawn inside a large circle.

What percentage of the large circle is shaded?