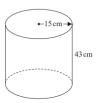
Edexcel GCSE Mathematics Calculator 2023 Higher Paper 2 Revision Worksheet

- 1. Expand and simplify 3(2y 5) + 7(y + 2).
- 2. Factorise fully $6x^2 + 15x$.
- 3. Make g the subject of the formula f = 3g + 11.
- 4. Karen is organising a party for a charity. She spends £100 on food, £120 on a hall, and £80 on a DJ. Karen sells 54 tickets for the party. Each ticket costs £7.
- 5. Work out the percentage profit Karen makes for the charity.
- 6. Andrew invests £4500 in a savings account for 2 years. The account pays compound interest at a rate of 3.4% per year. Calculate how much Andrew has in his savings account at the end of the 2 years.
- 7. Solve 5x 14 = 52 x.
- 8. Chris, Debbie and Errol share some money in the ratio 3:4:2. Debbie gets £120. Chris then gives some of his share to Debbie and some of his share to Errol. The money that Chris, Debbie and Errol each have is now in the ratio 2:5:3. How much money did Chris give to Errol?
- 9. The bearing of port B from port A is 147°. Work out the bearing of port A from port B.
- 10. The diagram shows an empty tank in the shape of a cylinder with radius 15 cm and height 43 cm. Water flows into the tank at a rate of 0.47 litres per minute. Calculate the number of minutes it will take to completely fill the tank. Give your answer correct to the nearest minute.



- 11. A number *x* is written correct to 2 significant figures. The result is 1.
- 12. Complete the error interval for $x:__ \le x < __$
 - 11. Expand and simplify (x + 7)(x 2)(x + 3).
 - 12. A is the point with coordinates (7, 13), B is the point with coordinates (-3, 21), C is the point with coordinates (15, 23). M is the midpoint of AB. N is the midpoint of BC. Work out the distance between M and N. Give your answer correct to 1 decimal place.