



- 1 Work out $(-3) \times 4$

(1 mark)

$$3 \times 4 = 12$$

negative $\times$ positive = negative

-12

- 2 Work out $(-6) \times (-7)$

(1 mark)

$$6 \times 7 = 42$$

negative $\times$ negative = positive

42

- 3 Work out $-20 \div 5$

(1 mark)

$$20 \div 5 = 4$$

negative $\div$ positive = negative

-4

- 4 Work out $-36 \div (-9)$

(1 mark)

$$36 \div 9 = 4$$

negative $\div$ negative = positive

4

- 5 At midnight the temperature in Leeds was 4°C . The temperature then fell by 3°C every hour for 5 hours.

Work out the temperature after 5 hours.

(2 marks)

$$5 \times 3 = 15 \text{ degrees fall}$$

$$4 - 15 = -11$$

-11°C

6 Amir says that $-8 \div -2 = -4$.

Amir is wrong. Work out the correct answer and explain his mistake.

(2 marks)

$$8 \div 2 = 4$$

negative $\div$ negative = positive

4

7 a. $(-2) \times (-3) \times (-4)$

b. $-48 \div 6 \div (-2)$

(2 marks)

a)

$$-2 \times -3 = 6$$

$$6 \times -4 = -24$$

-24

b)

$$-48 \div 6 = -8$$

$$-8 \div -2 = 4$$

4

8 Write down the missing number in each calculation.

a. $\square \times (-4) = 28$

b. $\square \div (-5) = 6$

c. $18 \div \square = -3$

(3 marks)

a)

$$28 \div -4 = -7$$

-7

b)

$$6 \times -5 = -30$$

-30

c)

$$18 \div -3 = -6$$

-6

9 Work out $(-2) \times 5 - (-12) \div 4$

(3 marks)

$$-2 \times 5 = -10$$

$$-12 \div 4 = -3$$

$$= -10 - (-3)$$

$$-10 + 3 = -7$$

$$\boxed{-7}$$

10 a. Work out $(-5)^3$

b. Use your calculator to work out $\sqrt{2.56}$

(2 marks)

$$a) (-5)^3 = -5 \times -5 \times -5 = 25 \times -5 = -125$$

$$b) 1.6 \times 1.6 = 2.56, \text{ so } \sqrt{2.56} = 1.6$$

11 a. Work out $(-4)^2$

b. Work out $2 - (-7)$

c. Put a pair of brackets in this statement to make it true.

$$3 - 5 \times 2 = -4$$

(3 marks)

$$a) (-4)^2 = -4 \times -4 = 16 \text{ (negative times negative is positive)}$$

b) Subtracting -7 is the same as adding 7

$$2 + 7 = 9$$

$$c) (3 - 5) \times 2 = -2 \times 2 = -4, \text{ so the brackets go around } 3 - 5$$