

Negative Numbers - Worksheet

Skill

Group A - Adding and subtracting negative numbers

Answer the questions below:

1) $-9 + 5 =$

2) $-7 - 6 =$

3) $8 + (-7) =$

4) $-17 - (-12) =$

5) $-16 + 7 - 9 =$

6) $-12 - (-8) - (-15) =$

7) $-98 - 44 =$

8) $146 - (-98) + (-78) =$

9) $-9.8 + 6.5 - 2.8 =$

10) $-7.6 - 4.6 + (-14.78) =$

11) $-\frac{1}{2} + \frac{1}{4} =$

12) $-3\frac{2}{3} + (-4\frac{2}{5}) =$

Group B - Multiplying and dividing negative numbers

Answer the questions below:

1) $-8 \times 7 =$

2) $-27 \div (-3) =$

3) $-12 \times (-13) =$

4) $135 \div (-3) =$

5) $-15 \times 2 \div (-10) =$

6) $12 \div (-6) \times 10 =$

7) $(-5)^2 =$

8) $-9.3 \times (-2)^3 =$

9) $-7.4 \times 2.1 \div (-4) =$

10) $-3.8 \times (-2.1) \div (-3) =$

11) $-\frac{2}{3} \div (-2)^4 =$

12) $\frac{4}{5} \times (-\frac{2}{9}) =$

Group C - Mixed operations

Answer the questions below:

1) $-9 \times 2 + 5 =$

2) $8 \div 2 - 10 =$

3) $-7 - (-4)^2 =$

4) $(-4)^3 \div 2 - 5 =$

5) $3^2 - 27 \div 9 =$

6) $(-9)^3 \times (-3)^2 + 4 =$

7) $-29 \times 2 - 300 =$

8) $-99 \times (-8) - 54 =$

9) $-7.8 + (4.2)^2 \times (-3) =$

10) $-8 + (-1.5)^2 \times 2 =$

11) $\frac{1}{3} \times (-\frac{5}{6}) - 2 =$

12) $-\frac{1}{2} \times (-\frac{3}{4}) - \frac{5}{8} =$

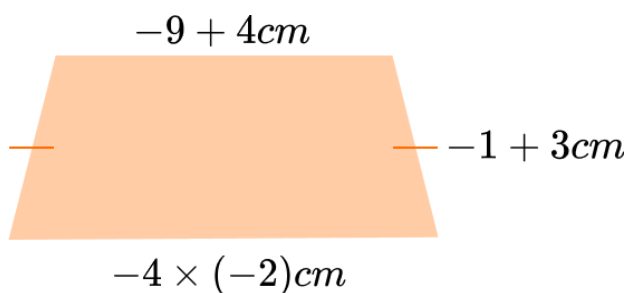
Negative Numbers - Worksheet

Applied

- 1) (a) Kyle had £897 in his bank account and he bought a laptop which was £250, a sofa for his house for £698 and a box of chocolates each for his 2 friends for £10.99 each. How much is Kyle in debt?
- (b) The bank charges 5% interest on any money overdrawn. How much will Kyle have to pay in interest?
- 2) (a) Create 3 calculations involving addition where your answer is -19 .
- (b) Create 3 calculations involving multiplication where your answer is -36 .
- 3) Shown below is a magic square where the sum of all rows, columns, and diagonals is the same. Fill in the missing numbers:

0		
5	1	
		2

- 4) Find the perimeter of the shape below:



Negative Numbers - Exam Questions

- 1) (a) Calculate the following: (1)
 $- 7 + (- 9) =$
- (b) $- 28 \div 7 + 9 =$ (1)
(2 marks)

- 2) (a) The table on the right shows the temperature in various cities across Europe in the Winter. (1)
Write down the highest temperature.
- | City | Temperature |
|---------|-------------|
| Madrid | 5°C |
| Hungary | - 12°C |
| London | - 6°C |
| Dublin | - 10°C |
| Paris | 1°C |
| Hamburg | 2°C |
- (b) What is the difference between the highest and lowest temperatures? (2)
(3 marks)

- 3) Mr. and Mrs. Honey had (2 marks)
£64 in their bank account.
They spent £30 on their
gas bill, £18 on their
phone bill and £50 on their
utilities bill. How much
were the Honeys in debt?

Negative Numbers - Exam Questions

- 4)** **(a)** At 6AM the temperature in
Norwich was -9°C . At **(2)**
10AM the temperature rose
to 5°C . What is the
difference between the
temperature at 6AM and
10AM?
- (b)** From 10AM to 10PM the
temperature fell by 12°C **(2)**
Work out the temperature **(4 marks)**
at 10PM.

Negative Numbers - Answers

	Question	Answer
Group A	Skill Questions	
	Answer the questions below: 1) $-9 + 5 =$ 2) $-7 - 6 =$ 3) $8 + (-7) =$ 4) $-17 - (-12) =$ 5) $-16 + 7 - 9 =$ 6) $-12 - (-8) - (-15) =$ 7) $-98 - 44 =$ 8) $146 - (-98) + (-78) =$ 9) $-9.8 + 6.5 - 2.8 =$ 10) $-7.6 - 4.6 + (-14.78) =$ 11) $-\frac{1}{2} + \frac{1}{4} =$ 12) $-3\frac{2}{3} + (-4\frac{2}{5}) =$	1) -4 2) -13 3) 1 4) -5 5) -18 6) 11 7) -142 8) 166 9) -6.1 10) -26.98 11) $-\frac{1}{4}$ 12) $-\frac{121}{15}$
Group B	Answer the questions below: 1) $-8 \times 7 =$ 2) $-27 \div (-3) =$ 3) $-12 \times (-13) =$ 4) $135 \div (-3) =$ 5) $-15 \times 2 \div (-10) =$ 6) $12 \div (-6) \times 10 =$ 7) $(-5)^2 =$ 8) $-9.3 \times (-2)^3 =$ 9) $-7.4 \times 2.1 \div (-4) =$ 10) $-3.8 \times (-2.1) \div (-3) =$ 11) $-\frac{2}{3} \div (-2)^4 =$ 12) $\frac{4}{5} \times (-\frac{2}{9}) =$	1) -56 2) 9 3) 156 4) -45 5) 3 6) -20 7) 25 8) 74.4 9) 3.885 10) -2.66 11) $-\frac{2}{48}$ 12) $-\frac{8}{45}$

Negative Numbers - Answers

	Question	Answer
Group C	Skill Questions	
	Answer the questions below: 1) $-9 \times 2 + 5 =$ 2) $8 \div 2 - 10 =$ 3) $-7 - (-4)^2 =$ 4) $(-4)^3 \div 2 - 5 =$ 5) $3^2 - 27 \div 9 =$ 6) $(-9)^3 \times (-3)^2 + 4 =$ 7) $-29 \times 2 - 300 =$ 8) $-99 \times (-8) - 54 =$ 9) $-7.8 + (4.2)^2 \times (-3) =$ 10) $-8 + (-1.5)^2 \times 2 =$ 11) $\frac{1}{3} \times (-\frac{5}{6}) - 2 =$ 12) $-\frac{1}{2} \times (-\frac{3}{4}) - \frac{5}{8} =$	1) -13 2) -6 3) -23 4) -37 5) 6 6) -6557 7) -358 8) 738 9) -60.72 10) -3.5 11) $-\frac{41}{18}$ 12) $-\frac{1}{4}$

Negative Numbers - Answers

	Question	Answer																		
	Applied Questions																			
1)	(a) Kyle had £897 in his bank account and he bought a laptop which was £250, a sofa for his house for £698 and a box of chocolates each for his 2 friends for £10.99 each. How much is Kyle in debt? The bank charges 5% interest on any money (b) overdrawn. How much will Kyle have to pay in interest?	(a) £72.98 (b) £3.65 (72.98 × 0.05)																		
2)	(a) Create 3 calculations involving addition where your answer is – 19. (b) Create 3 calculations involving multiplication where your answer is – 36.	(a) Answers may vary. Possible answers could include: – 7 + (– 12) = – 15 + (– 4) = – 10 + (– 9) = (b) Answers may vary. Possible answers could include: – 6 × 6 = – 12 × 3 = 9 × (– 4) =																		
3)	Shown below is a magic square where the sum of all rows, columns, and diagonals is the same. Fill in the missing numbers: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>0</td><td></td><td></td></tr> <tr><td>5</td><td>1</td><td></td></tr> <tr><td></td><td></td><td>2</td></tr> </table>	0			5	1				2	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>0</td><td>– 1</td><td>4</td></tr> <tr><td>5</td><td>1</td><td>– 3</td></tr> <tr><td>– 2</td><td>3</td><td>2</td></tr> </table>	0	– 1	4	5	1	– 3	– 2	3	2
0																				
5	1																			
		2																		
0	– 1	4																		
5	1	– 3																		
– 2	3	2																		

Negative Numbers - Answers

4)	Find the perimeter of the shape below:  $-9 + 4cm$ $-4 \times (-2)cm$ $-1 + 3cm$	$-9 + 14 = 5cm$ $-1 + 3 = 2cm$ $-1 + 3 = 2cm$ $-4 \times (-2) = 8cm$ Perimeter $= 5 + 2 + 2 + 8 = 17cm$
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Negative Numbers - Mark Scheme

	Question	Answer															
	Exam Questions																
1) (a)	Calculate the following: $- 7 + (- 9) =$	(a) $- 7 + (- 9) = - 16$	(1)														
(b)	$- 28 \div 7 + 9 =$	(b) $- 28 \div 7 + 9 = 5$	(1)														
2) (a)	The table on the right shows the temperature in various cities across Europe in the Winter. Write down the highest temperature. <table><tr><th>City</th><th>Temperature</th></tr><tr><td>Madrid</td><td>5°C</td></tr><tr><td>Hungary</td><td>- 12°C</td></tr><tr><td>London</td><td>- 6°C</td></tr><tr><td>Dublin</td><td>- 10°C</td></tr><tr><td>Paris</td><td>1°C</td></tr><tr><td>Hamburg</td><td>2°C</td></tr></table>	City	Temperature	Madrid	5°C	Hungary	- 12°C	London	- 6°C	Dublin	- 10°C	Paris	1°C	Hamburg	2°C	(a) 5°C	(1)
City	Temperature																
Madrid	5°C																
Hungary	- 12°C																
London	- 6°C																
Dublin	- 10°C																
Paris	1°C																
Hamburg	2°C																
(b)	What is the difference between the highest and lowest temperatures?	(b) $5 - (- 12)$ $= 17C$	(2)														
3)	Mr. and Mrs. Honey had £64 in their bank account. They spent £30 on their gas bill, £18 on their phone bill and £50 on their utilities bill. How much were the Honeys in debt?	$64 - 30 - 18 - 50$ $= - £34$	(2)														

Negative Numbers - Mark Scheme

4) (a)	At 6AM the temperature in Norwich was -9°C . At 10AM the temperature rose to 5°C . What is the difference between the temperature at 6AM and 10AM?	(a) $-9 - 5$ $= -14$ Difference is 14°C	(2)
(b)	From 10AM to 10PM the temperature fell by 12°C . Work out the temperature at 10PM.	(b) $5 - 12$ $= -7^{\circ}\text{C}$	(2)

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