Multiplying and Dividing Integers

Solve the following problems. The sign rules for multiplication and division are the same:

Positive × or ÷ Positive = Positive

Negative × or ÷ Negative = Positive

Positive × or ÷ Negative = Negative

Negative × or ÷ Positive = Negative

1. $6 \times (-8) =$

2. $-5 \times (-9) =$

3. $48 \div 6 =$

4. $-35 \div 7 =$

5. $54 \div (-9) =$

6. $(-60) \div (-10) =$

7. Simplify the fraction: $\dfrac{-12}{18} =$

8. Calculate (answer as a decimal or simplified fraction): $18 \div (-4) =$

9. $-2 \times 3 \times (-5) =$

10. $7 \times \underline{} = -28$

11. $\underline{} \times (-6) = 42$

12. $-45 \div \underline{} = 9$

13. ____ $\div 4 = -8$

Product Grid: Complete the multiplication table by finding the product of each row and column.

×	-3	5	-8	-1
2	___	___	___	___
-4	___	___	___	___
-6	___	___	___	___

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14. The temperature dropped by a total of 24°C over 6 hours. What was the average change in temperature each hour?

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15. A submarine descends at a rate of 40 metres per minute. What is its depth relative to sea level after 5 minutes?

Powers of Negative Numbers: Be careful with the brackets! Remember your order of operations.

16. $(-5)^2 =$

17. $-5^2 =$

18. $(-2)^3 =$

Multiplying with Algebra: Apply the same sign rules when multiplying with variables.

19. $-5 \times 2a =$

20. $8x \times (-3) =$

21. $-4y \times (-6) =$