

REVIEW

Name

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Math 6

Period

A



Quiz

Expressions

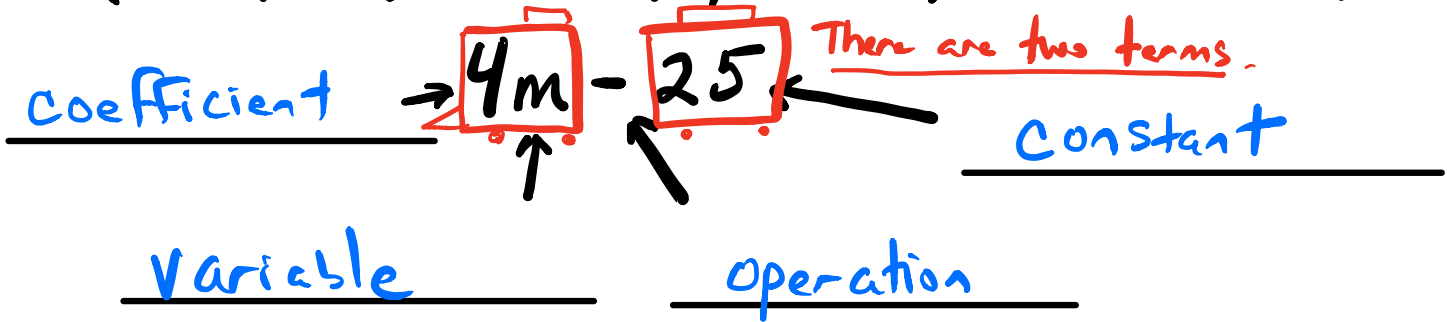
- Evaluate
- Translate
- Combine
- Distribute
- Factor

Test Date: Thursday, January 16th

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You are responsible for the information taught in class and on homework. Remember that mathematics is a subject that spirals (it builds upon itself), so keeping up with concepts as we go is very important. Good Luck!

I Can you label the parts of an expression?
(Coefficient, constant, operation, variable, terms)



How many terms are in the given expression? 2

II Substitute values and solve. Let $x = 4, 2.5, 10$

	$x=4$	$x=2.5$	$x=10$
1. $7x + 10$	$7(4) + 10 =$ $28 + 10 = 38$	$7(2.5) + 10 =$ $17.5 + 10 = 27.5$	$7(10) + 10 =$ $70 + 10 = 80$
2. $4x - 3$	$4(4) - 3$ $16 - 3 = 13$	$4(2.5) - 3 =$ $10 - 3 = 7$	$4(10) - 3$ $40 - 3 = 37$
3. x^2	$4^2 = 4 \cdot 4$ $= 16$	$(2.5)^2 = 2.5 \cdot 2.5$ $= 6.25$	$10^2 = 10 \cdot 10$ $= 100$
4. $10x - x^2$	$10(4) - 16$ $40 - 16 = 24$	$10(2.5) - 6.25$ $25 - 6.25 = 18.75$	$10(10) - 100$ $= 0$

III Translate the verbal model into a math expression.

5. The sum of 12 and m .

$$12 + m$$

6. 2 more than the product of 5 and x .

$$5 \cdot x + 2$$

7. The quotient of r and 4.

$$r \div 4$$

$$\frac{r}{4}$$

8. The difference of 9 and c squared.

$$9 - c^2$$

IV Combine like terms

9. $3x + y + 5x + 2$

$$8x + y + 2$$

10. $a + 7b + 4a - 5b - 10$

$$5a + 2b - 10$$

11. $8f + 3c - 2f + 2m + x + m$

$$6f + 3c + 3m + x$$

12. $5m^2 + 20 + 3m^2 - 8$

$$8m^2 + 12$$

⑤ Create an equivalent expression with the Distributive Property.

$$13. \quad 7(10x + 3) = \boxed{70x + 21}$$

$$14. \quad 2(3x + 4y + 2) = \boxed{6x + 8y + 4}$$

$$15. \quad 12(2x + y) + 4x = \boxed{24x + 12y} + 4x$$

⑥ Create an equal expression by factoring with a greatest common factor.

$$16. \quad \frac{4a}{2} + \frac{6b}{2} - \frac{10c}{2} = \underline{2} (2a + 3b - 5c)$$

$$17. \quad 24x - 16y = \underline{8} (3x - 2y)$$

$$18. \quad 49a + 56c = \underline{7} (7a + 8c)$$

$$19. \quad 5m + 30n = \underline{5} (m + 6n)$$

BONUS QUESTION!!!

20 TOP 20: Finding 12.5% of a number is the same as finding $\frac{1}{8}$ ⁰⁰

what is 12.5%

$$\frac{12.5}{100} = \frac{125}{1000} \stackrel{\div 25}{=} \frac{5}{40} \stackrel{\div 5}{=} \frac{1}{8}$$

$\frac{1}{8}$

WHAT FRACTION