Forming Equations

7a. Use some of the cards to create an algebraic equation.

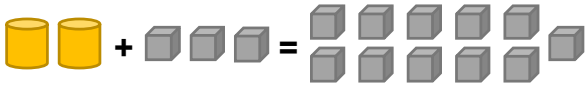
-2	14	n	20	0.75	$\frac{1}{4}$

Write a word problem to match the equation created.

GD PS

8a. Which is the odd one out?

A. I think of a number. I multiply it by 2.3. I subtract 3. My answer is 10.

B. 

C. $2n + 3 = 11$

Explain your answer.

GD R

9a. Sophia and Otis are creating word problems based on the equation below.

$-6 = 0.5d - 22$



Sophia: My answer is -6. To get this answer, I divided a number by 0.5 and subtracted 22.



Otis: My answer is -6. To get this answer, I multiplied a number by 0.5 and subtracted 22.

Who is correct? Explain your answer.

GD R

Forming Equations

7b. Use some of the cards to create an algebraic equation.

-5	20	n	15	0.5	$\frac{3}{4}$

Write a word problem to match the equation created.

GD PS

8b. Which is the odd one out?

A. I think of a number. I multiply it by 4. I add 2. My answer is 14.

B. 

C. $-2 + 4n = 16$

Explain your answer.

GD R

9b. Tom and Jaya are creating word problems based on the equation below.

$14.75 = 3h - 12.25$



Tom: I multiplied a number by 3 and added it to 12.25 to get an answer of 14.75.



Jaya: My answer is 14.75. To get this answer, I multiplied a number by 3 and subtracted 12.25.

Who is correct? Explain your answer.

GD R

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Reasoning and Problem Solving
Forming Equations

Developing

1a. Various answers, for example: $n - 2 = 8$. Bessy had some crayons. She gave 2 of them to her friend. She had 8 crayons left.

2a. Option C, as A and B both represent adding 4 to an unknown number. C represents 4 being subtracted from an unknown number.

3a. Chris is correct as his answer shows addition. Elle's equation is $13 - p = 5$.

Expected

4a. Various answers, for example: $4n + 0.5 = 20$. Adnan creates 4 fractions using shapes. He adds 0.5. His fractions equal 20.

5a. Option A, as it represents $\frac{1}{2}n = 6$.
B and C represent $3n = 6$.

6a. Eva is correct as $4r$ is the same as 4 x r. Jackson has divided r by 4, instead of multiplying.

Greater Depth

7a. Various answers, for example: $0.75n - 14 = -2$. Leon has created an equation. He multiplies an unknown number by 0.75 and subtracts 14. His answer is -2.

8a. Option A, as it represents $2.3n - 3 = 10$.
B and C both represent $2n + 3 = 11$.

9a. Otis is correct as $0.5d$ is the same as 0.5 x d. Sophia's equation would be $-6 = d \div 0.5 - 22$.

Reasoning and Problem Solving
Forming Equations

Developing

1b. Various answers, for example: $2n - 4 = 8$. Sam has 2 bags of cookies. He eats 4. He has 8 cookies left.

2b. Option B, as A and C represent adding 3 to an unknown number to give a total of 5. B represents 4 being added to an unknown number to give a total of 5.

3b. Toya is correct as $2n$ is the same as 2 x n. Riley's equation is $n \div 2 = 8$.

Expected

4b. Various answers, for example: $\frac{1}{2}n - 2 = 6$. Half of the people at a party have already left. 2 more leave. There are 6 left.

5b. Option B, as it represents $4n = 12$.
A and B represent $6n = 12$.

6b. Lisa is correct as her equation shows a subtraction of 3.5. Vansh's equation would be $a - 15.5 = 3.5$.

Greater Depth

7b. Various answers, for example: $0.5n - 20 = -5$. Sonya has created an equation. She multiplies an unknown number by 0.5 and subtracts 20. Her answer is -5.

8b. Option C, as A and B both represent $4n + 2 = 14$.

9b. Jaya is correct because she has subtracted 12.25. Tom's equation would be $3h + 12.25 = 14.75$.

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