## Regents Exam Questions

## CC.A.SSE.1: Modeling Expressions 1

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- 7 If Angelina's weekly allowance is d dollars, which expression represents her allowance, in dollars, for x weeks?
  - 1) dx
  - 2) 7dx
  - 3) x + 7d
  - 4)  $\frac{d}{x}$
- 8 Which expression represents the number of hours in w weeks and d days?
  - 1) 7w + 12d
  - 2) 84w + 24d
  - 3) 168w + 24d
  - 4) 168w + 60d
- 9 Jose wants to ride his bike a total of 50 miles this weekend. If he rides m miles on Saturday, which expression represents the number of miles he must ride on Sunday?
  - 1) m-50
  - 2) m + 50
  - 3) 50-m
  - 4) 50m
- 10 Owino gets paid \$280 per week plus 5% commission on all sales for selling electronic equipment. If he sells n dollars worth of electronic equipment in one week, which algebraic expression represents the amount of money he will earn that week?
  - 1) 280n + 5
  - 2) 280n + 0.05
  - 3) 280 + 0.05n
  - 4) 280 + 5n

- 11 Julie has three children whose ages are consecutive odd integers. If x represents the youngest child's age, which expression represents the sum of her children's ages?
  - 1) 3x + 3
  - 2) 3x + 4
  - 3) 3x + 5
  - 4) 3x + 6
- 12 What is the perimeter of a regular pentagon with a side whose length is x + 4?
  - 1)  $x^2 + 16$
  - 2) 4x + 16
  - 3) 5x + 4
  - 4) 5x + 20
- The length of a rectangular room is 7 less than three times the width, w, of the room. Which expression represents the area of the room?
  - 1) 3w-4
  - 2) 3w-7
  - 3)  $3w^2 4w$
  - 4)  $3w^2 7w$

## Algebra I Practice CC.A.REI.3: Solving Linear Equations 2 www.jmap.org

CCSS.A.REI.3: Solve linear equations and linear inequalities in one variable, including equations with coefficients represented by letters (literal that are linear in the variables being solved for).

NAME:\_\_\_\_\_

6. 
$$5 = 2(x - 8) - x$$

[A] -21 [B] 3 [C] -3 [D] 21

Solve:

1. 
$$-2x+15+4x+15 = -6$$
  
[A] -12 [B] 12 [C] 18 [D] -18

7. 
$$3 = 10(x - 4) - 5x$$
[A]  $\frac{1}{5}$  [B]  $8\frac{3}{5}$  [C]  $-8\frac{3}{5}$  [D]  $-\frac{1}{5}$ 

2. 
$$-9x+21+11x+21 = 2$$
  
[A] -22 [B] -20 [C] 20 [D] 22

8. 
$$7 = 8(x+5) + 5x$$

[A]  $\frac{2}{13}$ 

[B]  $2\frac{7}{13}$ 

[C]  $-\frac{2}{13}$ 

[D]  $-2\frac{7}{13}$ 

3. 
$$2 = 5(x+9) + 8x$$

[A]  $\frac{7}{13}$ 

[B]  $-3\frac{4}{13}$ 

[C]  $3\frac{4}{13}$ 

[D]  $-\frac{7}{13}$ 

9. 
$$6n+12-8n=22$$

4. 
$$6 = 6(x + 5) - 2x$$
[A]  $-\frac{1}{4}$  [B]  $-6$  [C] 6 [D]  $\frac{1}{4}$ 

10. 
$$5n+26-3n=54$$

5. 
$$-8 = 10(x - 3) + 6x$$
  
[A]  $\frac{11}{16}$  [B]  $1\frac{3}{8}$  [C]  $-1\frac{3}{8}$  [D]  $-\frac{11}{16}$