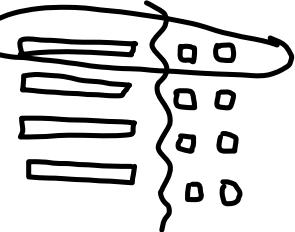
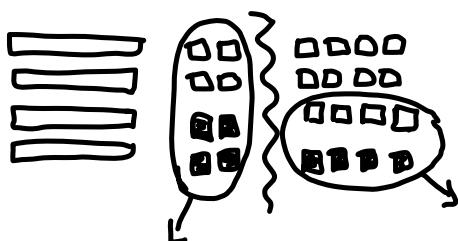


Grade Seven Mathematics
Solving Equations Worksheet #3

MODEL EACH SOLUTION USING ALGEBRA TILES

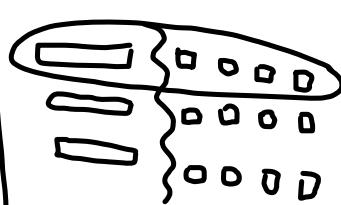
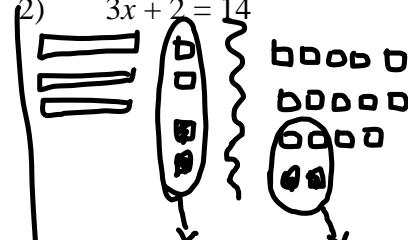
1) $4x + 4 = 12$



$\{ \text{---} \}$

$x=2$

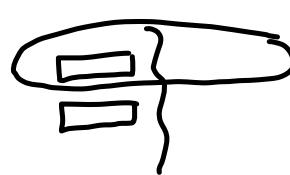
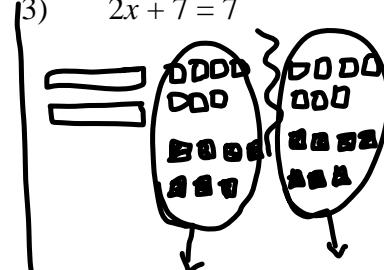
2) $3x + 2 = 14$



$\{ \text{---} \}$

$x=4$

3) $2x + 7 = 7$



$\{ \text{---} \}$

$x=0$

4) $6x + 6 = 18$

5) $24 = 5x + 9$

6) $4x + 4 = 28$

SOLVE FOR THE MISSING VARIABLE

7)
$$\begin{array}{r} 12 + 8x = 68 \\ -12 \end{array}$$

$$\frac{8x}{8} = \frac{56}{8}$$

$$\boxed{x = 7}$$

8)
$$\begin{array}{r} 2x + 10 = 56 \\ -10 \end{array}$$

$$\frac{2x}{2} = \frac{46}{2}$$

$$\boxed{x = 23}$$

9)
$$\begin{array}{r} 6x + 12 = 12 \\ -12 \end{array}$$

$$\frac{6x}{6} = \frac{0}{6}$$

$$\boxed{x = 0}$$

10) $4x + 2 = 10$

11) $8 + 10x = 98$

12) $435 = 4x + 7$

13) $83 = 9x + 11$

14) $5x + 4 = 44$

15) $4x + 8 = 36$

16) $6 + 3x = 24$

17) $20x + 7 = 87$

18) $139 = 14 + 25x$

19) $9x + 5 = 32$

20) $8x + 2 = 26$

21) $20 + 15x = 95$

22) $44 = 6x + 2$

23) $17 = 5 + 4x$

24) $8x + 5 = 29$