

Solving Equations with Bar Models

Lesson 6-3

DATE _____

TIME _____

Math Message

Bar-model diagrams are useful tools for solving equations with variables on both sides of the equal sign.

Study the example below, and then use a bar model to solve for d in Problem 1.

Example: $3v + 2 = 6 + v$

$3v$	2
v	6

v	v	v	2
v	4		2

$$v = 2$$

v	v	v	2
v	2	2	2

1 $3d + 12 = 20 + d$

$$d = \underline{\hspace{2cm}}$$

2 Explain how you can check your answer to Problem 1.

Use a bar model to solve each of the following equations.

3 $6f + 7 = 4f + 11$

Solution: _____

4 $86 = 14 + 3b$

Solution: _____

5 $98 + x = 3x + 14$

Solution: _____