Lesson 21

I can use inverse operations to solve one-step equations using multiplication and division. (HSA-CED-A1, HSA-REI-A1, HSA-REI-B3)

Go to www.mybigcampus.com to view 3 video clips for this lesson. After each clip, complete the "on your own" problems.


Clip 1 - Multiply/Divide

Inverse operations are operations that undo each other

Multiplication and Division Properties of Equality
Multiplication Property of Equality Both sides of an equation can be multiplied by the same number, and the statement will still be true. Examples $2 = 2$ $a = b$
Division Property of Equality Both sides of an equation can be divided by the same number, and the statement will still be true. Examples $10 = 10$ $a = b$

Use inverses to solve each equation, then check:

1. $-5x = 20$ 2. $-12 = 3n$ 3. $\frac{x}{6} = 8$

Now try these on your own:

4. $-8y = 24$ 5. $-15 = 3x$ 6. $\frac{k}{9} = 3$

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Clip 2 - Fractions

Use reciprocals to solve each equation, then check:

7. $\frac{2}{5}p = 7$ 8. $-11 = \frac{1}{4}w$ 9. $9 = -\frac{3}{8}x$

Now try these on your own:

10. $\frac{3}{4}y = 11$ 11. $-20 = \frac{1}{5}m$ 12. $8 = -\frac{5}{12}n$

Clip 3 - Word Problem

13. Anita is an architect. She is designing a rectangular room that has an area of 126 square feet. If the length of the room is 12 feet, what is its width?

Now try this on your own:

14. A rectangular pool has an area of 140 square feet. If the length of the pool is 16 feet, what is its width?

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Assignment: Lesson 21 p.124 #1-30