

Algebra 1 week 5 Block W-up

Skill 1:

Solve, showing ALL steps

1. $-3(y - 7) + 3 = 3y - (y + 1)$

2. $4(x + 2) + 7x = 5 - (4 - 6x) + 5x$

Skill 2:

Write and solve the proportion:

3. The boys water polo team swims approximately 4100 meters during each game. There are about 1607 meters in a mile. How many miles do they swim during a game? Round to the nearest tenth.

Percent change:

4. Alice saw a flier that said the original price of some jeans was \$64. The sale price was \$56.32. The flier was ripped so how could she figure out what % the jeans were marked down?

A1 w5d3 Review Chap 2.notebook

P 153/Chapter 2 Review

Classwork Block week 5

Name _____ per _____

<p>Solve and CHECK 11. $\frac{y}{4} - 3 = -4$</p>	<p>Solve and CHECK 13. $-\frac{3d}{4} + 5 = 11$</p>	<p>Solve and CHECK 16. $7(x - 5) = 42$</p>
<p>Solve and CHECK 18. $-4b - 5 + 2b = 10$</p>	<p>Write and solve the eqn. 23. Online concert tickets cost \$37 each, plus a service charge of \$8.50 per ticket. The Website also charges a transaction fee of \$14.99 for the purchase. You paid \$242.49. How many tickets did you buy?</p>	<p>Solve, then label as no solution or identity if appropriate. 26. $3(h - 4) = -\frac{1}{2}(24 - 6h)$</p>
<p>29. A train makes a trip at 65 mph. A plane traveling 130 mph makes the same trip in 3 fewer hours. Write and solve an equation to find the distance of the trip.</p>	<p>Solve the equation for x 31. $\frac{x+r}{t} + 1 = 0$</p>	<p>Solve, round to nearest tenth, if needed. 34. What is the width of a rectangle with length 5.5cm and area 220 cm²?</p>
<p>Solve, round to nearest tenth, if needed. 36. A triangle has height 15 in. and area of 120 in². What is the length of its base?</p>	<p>Convert the given amount to the given unit. 40. 2.25 mi; yd</p>	<p>42. A gerbil eats about $\frac{1}{4}$ oz of food per day. About how many pounds of food will he eat in a year?</p>

A1 w5d3 Review Chap 2.notebook

<p>43. If a baseball travels 90 mph, how many seconds does it take to travel 60 ft?</p>	<p>Solve the proportion. 44. $\frac{3}{7} = \frac{9}{x}$</p>	<p>Solve the proportion. 48. $\frac{b+3}{7} = \frac{b-3}{6}$</p>
<p>50. An airplane has a wingspan of 25 ft and a length of 20 ft. You are designing a model of the airplane with a wingspan of 15 in. What will the length of your model be?</p>	<p>52. What percent of 37 is 111?</p>	<p>53. What is 72% of 150?</p>
<p>54. 60% of what number is 102?</p>	<p>55. A gardener expects that 75% of the seeds she plants will produce plants. She wants 45 plants. How many seeds should she plant?</p>	<p>60. Tell whether each percent change is an increase or a decrease. Then find the percent change. Round to the nearest percent. Original amount: 873 New amount: 781</p>
<p>62. In 1970, the US population was about 205 million people. In 2007, it was about 301 million. What was the percent increase?</p>	<p>64. This morning the temperature was 38°F. This afternoon it is 57°F. Did the temperature increase by 50%? Explain.</p>	<p>Extra space to explain #64:</p>
<p>Scrambled answers: 47, 21,11, -4, 40,300,11,identity,~0.45,108,-8, x=-t-r,16,~6,39,60,-15/2,390,12,5,170,yes,3960</p>		

Time for assessments:

Wk 5 Quiz

Skill Test 2

HW: p. 157 (7,8,9,10,14,18)

Solve each equation. Check your answer.

3. $3w + 2 = w - 4$

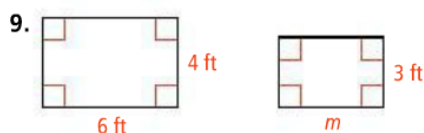
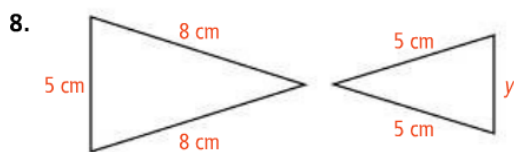
4. $\frac{1}{4}(k - 1) = 7$

5. $6y = 12.8$

6. $\frac{5n + 1}{8} = \frac{3n - 5}{4}$

7. **Bicycling** You are riding your bicycle to prepare for a race. It takes you 12 min to go 2.5 mi. What was your speed in miles per hour?

The figures in each pair are similar. Find the missing length.



10. **Shadows** In the late afternoon, a 3.5-ft child casts a 60-in. shadow. The child is next to a telephone pole that casts a 50-ft shadow, forming similar triangles. How tall is the telephone pole?

Define a variable and write an equation to model each situation. Then solve.

13. **Farming** You have 100 ft of fencing to build a circular sheep pen.
- What is the diameter of the largest pen you can build? Use 3.14 for π .
 - What is the area of the largest pen you can build?
14. **Maps** The scale on a map is 1 in. : 25 mi. You measure 6.5 in. between two towns. What is the actual distance?
15. **Birds** In a bird sanctuary, 30% of the birds are hummingbirds. If there are about 350 birds in the sanctuary at any given time, how many are hummingbirds?

Do you UNDERSTAND?

16. **Reasoning** Explain which is more accurate: measuring to the nearest millimeter or to the nearest eighth of an inch.
17. **Writing** A 30-pack of blank CDs costs \$9.50. A 50-pack of blank CDs costs \$13. How can you tell which is the better buy?
18. **Error Analysis** Average attendance at a school's basketball games increased from 1000 to 1500 last year. One student said that represented a 150% increase. Explain the student's error. What was the actual percent increase?