Name ______ Date _____



Skills Maintenance

Double Inequalities

Select the double inequality that matches the word statement in each problem. $% \label{eq:continuous}%$

- 1. The low temperature for the day was -5 and the high temperature was 15. Show the temperature range, t, using a double inequality.
 - (a) $-5 \le t \le 15$
 - **(b)** $-5 \le t < 15$
 - (c) $-5 < t \le 15$
- 2. Children in Kiddy's Fun Play Land must be at least 2 and less than 8 years old. Show the range of ages, *a*, using a double inequality.
 - (a) 2 < a < 8
 - **(b)** $2 < a \le 8$
 - (c) $2 \le a < 8$
- **3**. The range of scores on the midterm exam went from a low of 53 to a high of 99. Show the range of scores, s, using a double inequality.
 - (a) 53 < s < 99
 - **(b)** $53 \le s \le 99$
 - (c) 53 > s < 99
- **4**. At the family reunion, the youngest grandchild was 5 years old and the oldest grandparent was 87. Show the range of ages, *a*, using a double inequality.
 - (a) $5 \le a < 87$
 - **(b)** $5 \le a \le 87$
 - (c) $5 \le a > 87$

Name ______ Date _____



Problem-Solving Activity

Comparing Different Rates

Answer the questions by comparing the different rates. Use a proportion to explain your answer.

 Crew A makes 30 sandwiches in 20 minutes. Crew B makes 50 sandwiches in 30 minutes. Which is the fastest crew? Base the comparison on how many sandwiches they each make in an hour (60 minutes).

Crew A Sandwiches — — — —

Crew B Sandwiches — — — —

Which crew is faster?

2. Crew C can make 5 signs in 10 minutes. Crew D can make 8 signs in 15 minutes. Which is the fastest crew? Base your decision on how many signs each crew makes in a half hour.

Crew C Signs — — —

Crew D Signs — —

Which crew is faster? _____

3. Crew E earns \$100 in 3 days. Crew F can earn \$150 in 4 days. Which crew earns the most money? Base your decision on 12 days.

Crew E Money Earned Days

Crew F Money Earned _____ ____

Which crew earns the most money? _____

Problem-Solving Activity

Date_



Lesson 8

Problem-Solving Activity Comparing Different Rates

Use what you know about rate problems to answer the questions. Then underline what the question is asking you to find.

- 1. The Last Stop Car Wash does the cheapest oil changes in town. Andre and Jose are the only two workers on there on Saturday, so there is a long line for oil changes. It takes Andre 40 minutes to change the oil on 2 cars. Jose can do 4 cars in 60 minutes. After 2 hours or 120 minutes, they both take a break. What is the difference in the number of oil changes for the two workers?
- 2. Farmers harvest wheat with combines. The newer combines can do the job faster than old combines. A new combine can harvest 30 rows of wheat in 2 hours. The slower, older combine can do just 18 rows of wheat in the same time. What is the difference in the number of rows of wheat after 8 hours?
- 3. Let's say that you are driving 50 miles per hour and a car in the fast last goes past you at the rate of 60 miles an hour. How far ahead of you will this car be after 5 hours?
- 4. There is usually a big difference between what someone who has been on the job for a long time can do and what a new worker can do. Steele's furniture store puts together cabinets that come from the factory in boxes. Jennice has been working at Steele's for 3 years. She can put together 15 cabinets in a day. Kara was just hired. She has to keep reading instructions so that she can put together a cabinet. She can only assemble 8 cabinets in a day. What is the difference in the number of cabinets that they can assemble in 5 days?

Use the mBook Study Guide to review lesson concepts.