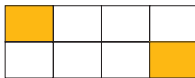




# Chapter 7 Section B Diagnostic Checkpoint

## MULTIPLE CHOICE

1. Which are two equivalent fractions that name the shaded part? (7-7)



- A.  $\frac{1}{2}, \frac{4}{8}$     **B.**  $\frac{1}{4}, \frac{2}{8}$     C.  $\frac{2}{8}, \frac{1}{2}$     D.  $\frac{2}{8}, \frac{2}{10}$

2. Which list shows  $3\frac{5}{18}$ ,  $\frac{19}{6}$ , and  $3\frac{7}{9}$  in order from least to greatest? (7-12)

- A.  $\frac{19}{6}, 3\frac{7}{9}, 3\frac{5}{18}$     B.  $3\frac{7}{9}, 3\frac{5}{18}, \frac{19}{6}$     C.  $3\frac{5}{18}, \frac{19}{6}, 3\frac{7}{9}$     **D.**  $\frac{19}{6}, 3\frac{5}{18}, 3\frac{7}{9}$

**TEST TALK**

**Think It Through**  
For multiple-choice questions, **eliminate wrong answers.**

## SHORT RESPONSE

Find the missing number to make the fractions equivalent. (7-8)

3.  $\frac{4}{\square} = \frac{32}{40}$     **5**    4.  $2\frac{5}{7} = 2\frac{\square}{42}$     **30**    5.  $3\frac{18}{\square} = 3\frac{3}{4}$     **24**    6.  $\frac{18}{54} = \frac{\square}{9}$     **3**

Find the GCF of each pair of numbers. (7-9)

7. 15, 18    **3**    8. 5, 9    **1**    9. 27, 72    **9**    10. 36, 100    **4**

Write each fraction in simplest form. (7-10)

11.  $\frac{8}{20}$      **$\frac{2}{5}$**     12.  $\frac{14}{63}$      **$\frac{2}{9}$**     13.  $\frac{21}{24}$      **$\frac{7}{8}$**     14.  $\frac{6}{22}$      **$\frac{3}{11}$**

Compare. Write  $>$ ,  $<$ , or  $=$  for each  $\bullet$ . (7-11, 7-12)

15.  $\frac{6}{7} \bullet \frac{6}{11}$      **$>$**     16.  $\frac{11}{20} \bullet \frac{5}{12}$      **$>$**     17.  $\frac{6}{7} \bullet \frac{8}{9}$      **$<$**     18.  $4\frac{3}{7} \bullet 4\frac{2}{5}$      **$>$**

Use the table at the right for 19–20. (7-11, 7-12)

19. Which piece of fabric is shorter, the blue or the white? **White piece of fabric**
20. Order the lengths of fabric from the least to the greatest. **Yellow, white, green, blue, red.**
22. **The fraction would be in simplest form if the only common factor of 15 and 40 was 1. However, both 15 and 40 are divisible by 5, so the fraction can be changed to  $\frac{3}{8}$ .**

**Yards of Fabric**

Color	Yards
Blue	$2\frac{2}{3}$
Green	$2\frac{1}{2}$
Red	$2\frac{3}{4}$
White	$2\frac{4}{9}$
Yellow	$\frac{1}{6}$

**Writing in Math** 21. **The factors of 8 are 1, 2, 4, and 8. The factors of 9 are 1, 3, and 9. The greatest number common to both lists is 1.**

21. Explain why the GCF of 8 and 9 is 1. (7-9) **See above.**
22. How do you decide whether  $\frac{15}{40}$  is in simplest form? (7-10) **See above.**