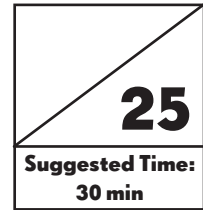


# Estimation and Number Theory



## Multiple Choice

(5 × 2 points = 10 points)

Fill in the circle next to the correct answer.

- Which is the closest estimate of  $78 \times 31$ ?  
(A)  $70 \times 30$     (B)  $70 \times 40$     (C)  $80 \times 30$     (D)  $80 \times 40$
- What is the estimated quotient of  $718 \div 6$ ?  
(A) 72    (B) 80    (C) 90    (D) 120
- Which of the statements is incorrect?  
(A) 2 is a common factor of 26 and 62.  
(B) 3 is a common factor of 13 and 19.  
(C) 13 is a common factor of 39 and 65.  
(D) 6 is a common factor of 18 and 78.
- What is the sum of the first two multiples of 8?  
(A) 8    (B) 16    (C) 24    (D) 32
- Which pair of these numbers has 20 as a common factor?  
(A) 2 and 3    (B) 2 and 6    (C) 10 and 20    (D) 20 and 40

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Short Answer

(5 × 2 points = 10 points)

**Write your answer in the space given.**

6. Find the product of  $489 \times 7$ . Estimate to check that your answer is reasonable.

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7. What is the sum of all the factors of 35?

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8. What is the greatest common factor of 12 and 15?

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9. Find two prime numbers between 30 and 45.

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10. What is the least common multiple of 6 and 8?

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Extended Response

(Question 11: 2 points, Question 12: 3 points)

### Solve. Show your work.

- 11.** Mr. Smith went to buy a refrigerator. He had \$346. The refrigerator cost \$783.
- a.** About how much more money does Mr. Smith need in order to buy the refrigerator?  
Round your answer to the nearest hundred dollars.
  - b.** After visiting the bank, Mr. Smith paid \$800 for the refrigerator. How much change did he receive?

Name: \_\_\_\_\_

Date: \_\_\_\_\_

- 12.** Tim goes swimming once a week.  
He swims on the same day each week.  
Amy goes swimming every other day.  
They went swimming together on February 1<sup>st</sup>.  
Use the calendar to find the next date that they will next swim together.

