

## Colorado Finest Review for Math Entrance Exam

This sheet is provided as a set of review problems that cover the same skills as the CFHSC entrance exam. This is a resource to prepare for a retake of the assessment. These are not the actual questions on the assessment.

1) Simplify

$$27 + (-43) - 12$$

- A. 58
- B. 28
- C. -28
- D. -82

2) Simplify

$$\frac{19}{20} - \left(\frac{1}{4} + \frac{1}{5}\right) =$$

- A.  $\frac{1}{2}$
- B.  $\frac{17}{20}$
- C.  $\frac{9}{10}$
- D.  $\frac{17}{11}$

3) Solve

$$7 \div \frac{7}{11} =$$

- A. 11
- B.  $7\frac{7}{11}$
- C.  $4\frac{5}{11}$
- D.  $\frac{1}{11}$

4) What number equals  $\frac{7}{8}$ ?

- A. 0.875
- B. 8.75
- C. 87.5
- D. 875

5) Convert the fraction to a decimal:

$$\frac{18}{30}$$

- A. 0.06
- B. 0.6
- C.  $1.\bar{6}$
- D. 6

6) Select the expression that is equal to:

$$(-2x + 9) - (3x - 4)$$

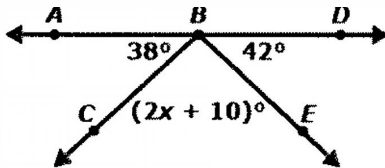
- A.  $-5x + 13$
- B.  $x + 5$
- C.  $-5x + 5$
- D.  $x + 13$

7) Which is the simplified version of  
 $7x - 4(x - 8) = 56$ ?

- A.  $11x + 32 = 56$
- B.  $3x - 8 = 56$
- C.  $3x - 32 = 56$
- D.  $3x + 32 = 56$

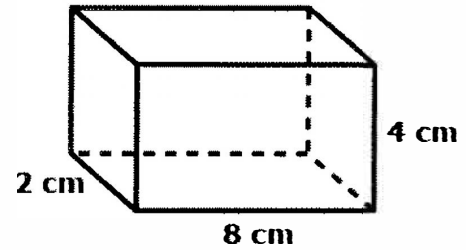
8) Use the information provided to complete two parts to the problem. Find the value of  $x$  AND determine the measure of angle  $LCBE$ .

In the figure below,  $m\angle ABC = 38^\circ$  and  $m\angle DBE = 42^\circ$ . Solve for  $x$  and find the measure of  $\angle CBE$ .



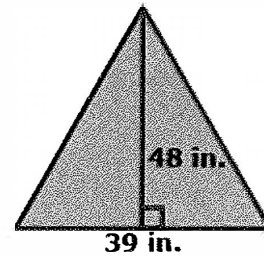
- A.  $x = 35$ ;  $\angle CBE = 80^\circ$
- B.  $x = 40$ ;  $\angle CBE = 90^\circ$
- C.  $x = 45$ ;  $\angle CBE = 100^\circ$
- D.  $x = 85$ ;  $\angle CBE = 180^\circ$

9) Calculate the surface area of the object provided.



- A.  $56 \text{ cm}$
- B.  $64 \text{ cm}^3$
- C.  $80 \text{ cm}^2$
- D.  $112 \text{ cm}^2$

10) What is the approximate area, in square feet, of the figure shown?  
 [Hint Area =  $\frac{1}{2}(\text{base} \times \text{height})$ ]



- A.  $6.5 \text{ ft}^2$
- B.  $13 \text{ ft}^2$
- C.  $78 \text{ ft}^2$
- D.  $156 \text{ ft}^2$