

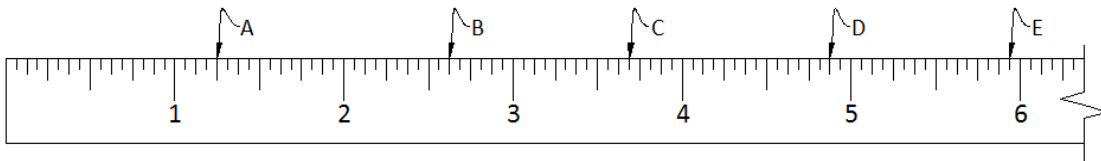
## Sample Math 20 Final Exam Questions

### NO CALCULATOR SECTION

1. Simplify:  $-\frac{5}{6} - \frac{7}{9}$

2. Simplify:  $\frac{-6-5(3^2-4\cdot3)}{(-2)^2-1}$

3. Find the measurements indicated by the arrows on the standard ruler.



4. Estimate:  $-3\frac{7}{30} + -6\frac{5}{7}$

5. Solve for x:  $\frac{8}{9} = \frac{12}{x}$

6. Simplify:  $\frac{7}{8} \div \left(-\frac{5}{6}\right)$

7. Write 40% as a decimal and a fraction.

8. Write the prime factorization of 60 using exponents.

### CALCULATOR SECTION

9. Find the sale price for a \$56 dollar sweater if it goes on sale for 30% off.

10. If a car travels at 65 miles per hour, how long will it take to drive 400 miles.  
Round your answer to the nearest minute.

11. Silver weighs 172.9 grams per cubic inch. Find the weight of 84 cubic centimeters of silver if one cubic inch is equal to 16.4 cubic centimeters.  
Round your answer to the nearest gram.

#### Solutions:

1.  $-1\frac{11}{18}$    2. 3   3. A.  $1\frac{1}{4}$    B.  $2\frac{5}{8}$    C.  $3\frac{11}{16}$    D.  $4\frac{7}{8}$    E.  $5\frac{15}{16}$    4.  $\approx -10$    5. 13.5   6.  $-1\frac{1}{20}$    7.  $0.4 = \frac{2}{5}$   
8.  $2^2 \cdot 3 \cdot 5$    9. \$39.20   10. 369 minutes   11. 886 grams