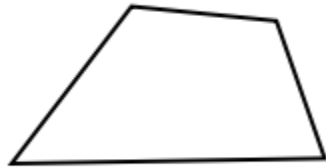


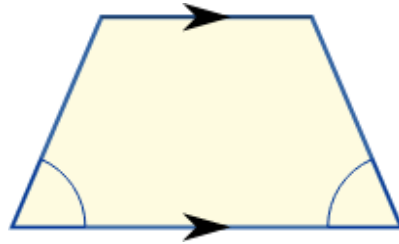


## MB2 Beginner Diagnostic Test

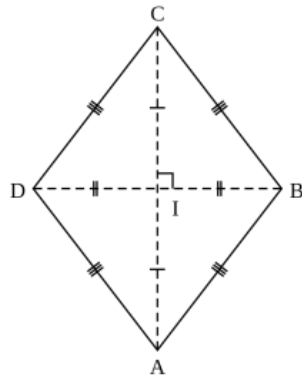
1. What is  $\frac{1}{2}(0.15) \cdot \frac{1}{4} \cdot 0.8 \cdot 800$ ?
2. Evaluate  $4 - \frac{4}{2}(4^2 - 4) + 4 + 2^2 \cdot 4$
3. Classify the following quadrilaterals, as specifically as possible:



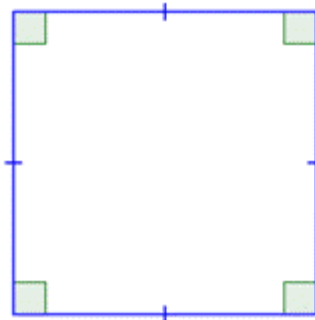
a.



c.

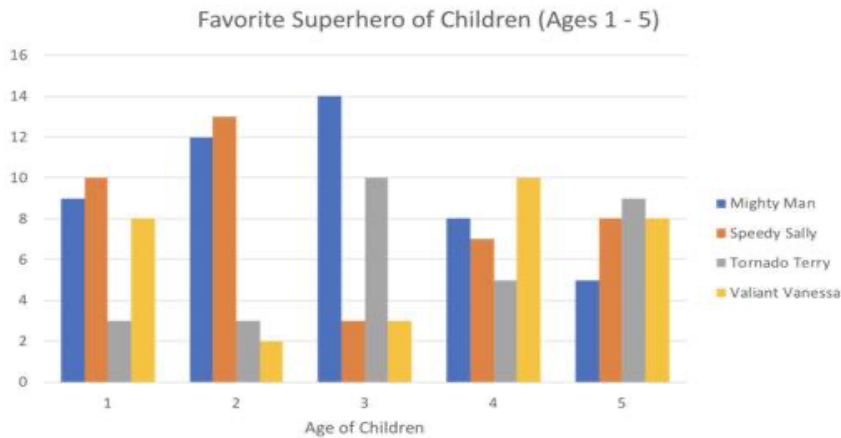


b.

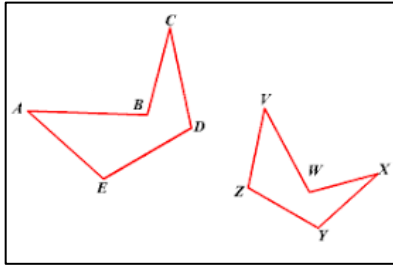


d.

4. How many more children like Speedy Sally than Valiant Vanessa?



5. Using the similar figures in the diagram find the length of AB.



6. If Sam is 3 feet and 5 inches tall and his older sister is 5 feet 3 inches, how many inches taller is Sam's sister than him?

7. Evaluate  $97 \cdot 103 - 85^2$

8. Sid has 18 pink daisies and 30 orange tulips. He wants to make the smallest possible number of identical bouquets and none left over. How many flowers will be in each bouquet?

9. A jacket was originally priced at \$80. After \$10 was deducted from a \$50 coupon, what percent of the original price is the jacket?

10. A square place mat has an area of 169 square inches. Riya decorates the place mat by putting lace around the edges. How many inches of lace will Riya need to buy?



## MB2 Beginner Diagnostic Test Answer Key

1. 12
2. 0
3. A. Quadrilateral  
B. Rhombus  
C. Isosceles Trapezoid  
D. Square
4. 10 children
5. 9 units
6. 22 inches
7. 2766
8. Since the gcd of 18 and 30 is 6, you can make 6 identical bouquets, each bouquet has 3 daisies and 5 tulips making 8 flowers.
9. 87.5%
10. 52 inches