

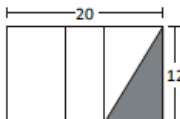


## Warm-Up 10

131. 24 Each pair of numbers below can be combined using one of the operations addition, subtraction, multiplication or division to obtain the same result. What is the common result for the three pairs?

Pair A: 6, 4  
 Pair B: 16, 8  
 Pair C: 36, 12

132. \$ 1.25 Grandpa has 18 coins in his pocket. Three of the coins are quarters and the rest are dimes and nickels. There are twice as many dimes as nickels. What is the total value of the nickels and dimes in his pocket?

133. 48 units<sup>2</sup>  Two squares of side length 12 units overlap to form a  $20 \times 12$  rectangle, as shown. What is the area of the shaded triangle?


134. 14 The product of a set of distinct, positive integers greater than 1 is 84. What is the least possible sum of these integers?

135. 90 pics An artist draws 20 pictures, one after the other, in 240 minutes. If she draws 3 times as fast, how many pictures will the artist draw in 6 hours?



136. 75 ° What is the degree measure of the smaller angle formed by the minute hand and the hour hand of a clock at 3:30?



137. 50 cm<sup>2</sup>  Gerard glues together 14 bricks to form the solid shown. Each brick is a cube with edge length 1 cm. Adjacent bricks are glued together so that faces entirely overlap. What is the surface area of Gerard's solid, including the bottom face?

138. 7 points A line contains the points  $P(1, 3)$  and  $Q(17, 43)$ . How many points on this line lie strictly between points  $P$  and  $Q$  and have two integer coordinates?

139. 24 ways In how many ways can the numeral 20 be written as the sum of three distinct positive integers? (Note:  $3 + 4 + 13$  and  $13 + 3 + 4$  are to be considered the same.)

140. 42 ways If a room has 7 doors, in how many ways can a person enter through one door and exit through a different door?

