

Warm-up 2

$$(41) \quad 3(10) + 4(10) + 5(10) = 120$$

$$(42) \quad 12 \text{ sides} \times 3 \text{ feet} = 36 \text{ feet}$$

$$(43) \quad \frac{60 \text{ mi}}{88 \text{ ft/s}} = \frac{15 \text{ mi}}{x \text{ ft/s}} \quad 60x = 15(88)$$
$$x = 22 \text{ ft/s}$$

(44) $64 = 2^6$, so the only divisors of 64 are powers of 2: 1, 2, 4, 8, 16, 32, 64

Perfect squares = (1), (4), (16), (64)

$$(45) \quad bd = c \quad d = 16$$

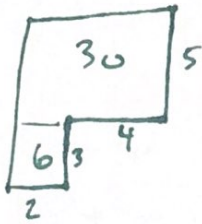
so $c = 16b$ $ab = 2c$

so $ab = 32b$

so $a = 32$

Warm-up 2

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36 square blocks

$$(47) \quad \frac{\frac{1}{2} + \frac{1}{3}}{\frac{1}{4} - \frac{1}{5}} = \frac{\frac{3}{6} + \frac{2}{6}}{\frac{5}{20} - \frac{4}{20}} = \frac{5}{6} \div \frac{1}{20} = \frac{5}{6} \times \frac{20}{1} = \frac{50}{3}$$

$$(48) \quad \frac{2}{3} + \frac{7}{9} + \frac{1}{4} + \frac{5}{16} = \frac{289}{144} \div 4 = \frac{289}{144} \times \frac{1}{4} = \frac{289}{576}$$

$$(49) \quad \begin{matrix} a+b = a-b \\ -a \quad -a \end{matrix}$$

$b = -b \Rightarrow$ so b has to be zero

substitute $b=0$ into $\frac{a^2b + a + b - ab^2}{a-b} = \frac{0 + a + 0 - 0}{a-0} = \frac{a}{a} = 1$

$$(50) \quad 75\% = \frac{3}{4} = \frac{6}{8}$$

$\frac{3}{8}$ is half of $\frac{6}{8}$

