2-6 Warm-Up

9/21/2017

Determine whether the ratios are equivalent.

1. $\frac{80}{30}, \frac{16}{6}$

2. $\frac{1.289}{5.622}, \frac{9.023}{39.354}$

3. $3:2, 42:26$

4. $\frac{3.8}{3.9}, \frac{7.8}{7.6}$

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1. $\frac{80}{30} \overset{\div 10}{=} \frac{8}{3}$ $\frac{16}{6} \overset{\div 2}{=} \frac{8}{3}$ $\div 2$ $\div 2$ = yes

2.* $\frac{1.289}{5.622} \overset{?}{=} \frac{9.023}{39.354}$

$1.289(39.354) = 5.622(9.023)$

$50.727306 = 50.727306$ ← yes

3. $\frac{3}{2} \overset{?}{=} \frac{42}{26}$

$2(42) = 3(26)$

$84 \neq 78$

↓

no

4. $\frac{3.8}{3.9} \overset{?}{=} \frac{7.8}{7.6}$

$3.8(7.6) = 3.9(7.8)$

$28.88 \neq 30.42$

↓

no

2-6 Day 2: Growth Rate & Scale | 9/21/2017

Tyjae's food truck company has employed 73 trucks in the past 3 years. If his company's growth remains constant, how many more trucks should Tyjae expect to have after 4 years?

$$\frac{73}{3} = \frac{t}{4}$$ setup a proportion

$$3t = 4(73)$$ cross-multiply

$$\frac{3t}{3} = \frac{292}{3}$$ solve

$$\boxed{t = 97.\overline{3}}$$ $\approx$ 97 more trucks after 4 years