

Lesson 19

$$1) \frac{8+6}{6} = \frac{180}{F}$$

$$\frac{14}{6} = \frac{180}{F}$$

$$14F = 6(180)$$

$$7F = 3(180)$$

$$7F = 540$$

$$F = 77 \frac{1}{7} \text{ gal.}$$

$$2) \frac{40+20}{20} = \frac{135}{S}$$

$$\frac{60}{20} = \frac{135}{S}$$

$$60S = 20(135)$$

$$3S = 135$$

$$S = \$45 \text{ for the son}$$

$$\$135 - \$45 = \$90$$

for the father

$$3) \frac{4}{200} = \frac{T}{575 - 200}$$

$$\frac{4}{200} = \frac{T}{375}$$

$$200T = 4(375)$$

$$50T = 375$$

$$T = 7 \frac{1}{2} =$$

7 hrs. 30 min.

$$4) \frac{8.5}{200} = \frac{G}{575}$$

$$200G = 8.5(575)$$

$$200G = 4887.5$$

$$G = 24.4 \text{ gal.}$$

(rounded)

$$5) \frac{3}{2} = \frac{7}{L}$$

$$3L = 14$$

$$L = 4 \frac{2}{3} \text{ loaves}$$

She can make 4 whole loaves.

$$6) \frac{4}{3} = \frac{T}{81}$$

$$3T = 324$$

$$T = 108 \text{ ft}$$

$$7) 6 \times 5 = M \times 3$$

$$30 = 3M$$

$$M = 10 \text{ machines}$$

$$8) 15 \times 36 = (15 + 9) \times D$$

$$540 = 24D$$

$$D = 22.5 \text{ days}$$

Lesson 20

$$1) \frac{4}{5.2} = \frac{25}{D}$$

$$4D = 5.2(25)$$

$$4D = 130$$

$$D = 32.5$$

33 miles rounded

$$2) 8.2 + 4.5 = 12.7 \text{ cm}$$

$$\frac{4}{12.7} = \frac{25}{D}$$

$$4D = 12.7(25)$$

$$4D = 317.5$$

$$D = 79.375$$

79 miles rounded

$$3) \frac{5}{7} = \frac{14}{D}$$

$$5D = 7(14)$$

$$5D = 98$$

$$D = 19 \frac{3}{5} \text{ or } 19.6 \text{ miles}$$

$$4) \frac{5}{3} = \frac{D}{6}$$

$$3D = 5(6)$$

$$3D = 30$$

$$D = 10 \text{ cm}$$

$$5) \frac{10}{15} = \frac{4000}{D}$$

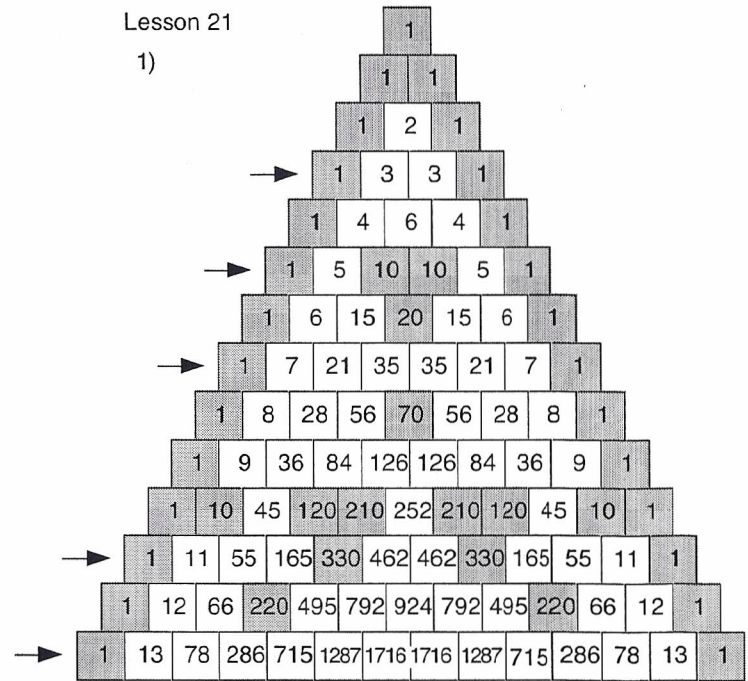
$$10D = 15(4000)$$

$$10D = 60,000$$

$$D = 6,000 \text{ miles}$$

Lesson 21

1)



2) yes

3) no

4) 11; it holds true (see diagram)

5) The next prime is 13; see diagram for shading of multiples of ten