Year 6 Homework Answers

Module 1: Fraction multiplication

1.

a) $\frac{5}{18}$	b) $\frac{1}{14}$	c) $\frac{1}{15}$
d) $\frac{4}{9}$	e) $\frac{3}{11}$	f) $\frac{11}{35}$
g) $\frac{9}{13}$	h) $\frac{2}{11}$	i) $\frac{1}{6}$
j) $\frac{1}{6}$	k) $\frac{11}{15}$	l) $\frac{1}{14}$

2.

a) 9	b) 88	c) $\frac{135}{4}$
d) 16	e) 27	f) $\frac{48}{5}$
g) 36	h) $\frac{39}{2}$	i) 26
j) 9	k) 25	l) 44

3.

a) $4 \times \frac{1}{3} = \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{4}{3}$

b) $\frac{3}{8} \times \frac{5}{6} = \frac{3\times5}{8\times6} = \frac{15}{48} = \frac{5}{16}$

c) $\frac{5}{12} \times \frac{5}{20} + \frac{8}{20} = \frac{5\times5}{12\times20} + \frac{8}{20} = \frac{25}{240} + \frac{8}{20} = \frac{121}{240}$

d) $\frac{3}{4} \times 100 = \frac{300}{4} = 75$

4.

a) $\frac{31}{24}$	b) 0	c) $\frac{7}{6}$
d) 8	e) $\frac{2}{3}$	f) $\frac{5}{8}$
g) $\frac{34}{5}$	h) $\frac{17}{20}$	i) $\frac{19}{150}$
j) $\frac{1}{6}$	k) $\frac{113}{8}$	l) $\frac{7}{10}$

5.   a) $\frac{147}{32}$ b) $\frac{7500}{7}$ c) $\frac{209}{72}$ d) $\frac{6}{5}$

6.

$$\frac{7}{8} \times \frac{1}{4} = \frac{7}{32}$$

Mia ate $\frac{7}{32}$ pieces of the left over pizza.

7.

$$125\frac{1}{4} \times 8 = 1002 \; grams$$

8 people need 1002 grams of bircher muesli.

8.

$$36 \times 1\frac{3}{5} = \frac{288}{5} \; cups$$

36 cupcakes need $\frac{288}{5}$ cups of milk.

9.

$$\frac{7}{8} \times \frac{3}{5} = \frac{21}{40}$$

He used $\frac{21}{40}$ of the jar of tinned tomatoes.

10.

$$1500 \times \frac{8}{15} = 800ml$$

$$1500 - 800 = 700 \; ml$$

Therefore, she still needs to drink 700ml of water to reach her goal.

11.

Tax: $546 \times \frac{1}{4} = \$\frac{273}{2} = \$136.5$

Earning after tax deduction: $546 - 136.5 = \$409.5$

Max can earn 409.5 dollars per week after the tax deduction

12.

$$189 \times \frac{13}{15} = \frac{819}{5} = 163.8 \; cm$$

Jonathan is 163.8 cm tall.

13.

$$96 \times \frac{7}{8} = 84 \ cups$$

Left over = 96 – 84 = 12 cups

Therefore, 12 cups were left over after the bake sale.

14.

Tony: $2\frac{1}{4} \ metres$

Lucy: $1\frac{3}{8} \ metres$

Total: $2\frac{1}{4} + 1\frac{3}{8} = \frac{29}{8} \ metres$

Note: This question is NOT about fraction multiplication.

Therefore, they used $\frac{29}{8}$ metres of wrapping paper in total

15.

Boys in Year 7: $240 \times \frac{5}{8} = 150$ boys

Girls in Year 7: 240 – 150 = 90 girls

Therefore, there are 90 girls in year 7.

16.

Students attended: $480 \times \frac{5}{12} = 200$

Students absented: 480 – 200 = 280

Therefore, 280 students missed school on this day.

17.

Cake for grandmother: $\frac{3}{4} \times \frac{2}{3} = \frac{1}{2}$

Therefore, there are still half of the remaining cake left in the box.

18.

6 apples weight: $\frac{1}{8} \times 6 = \frac{6}{8} \ kilograms = \frac{3}{4} \ kg$

Therefore, 6 apples weight is $\frac{3}{4}$ kilograms.

19.

24 cookies = 2 dozen

$\frac{7}{8}$ of a cup => 4 dozen

$\frac{7}{8} \times \frac{1}{2} = \frac{7}{16}$ of a cup of sugar

Therefore, 24 cookies need $\frac{7}{16}$ of a cup of sugar.

20.

$\frac{5}{7} \times \frac{1}{5} = \frac{1}{7}$

Therefore, $\frac{1}{7}$ of the animals that reside at aquarium are dolphins.