

M006
Practice Exam II

1. Write each decimal as a fraction or mixed number in lowest terms. (*Section 4.1*)

a) 7.25

b) 0.056

c) 8.125

d) 0.0065

2. Round to the place indicated. (*Section 4.2*)

a.) 392.776 to the nearest tenth _____

b.) 0.02993 to the nearest thousandth _____

c) \$510.82 to the nearest dollar _____

d) \$1.2429 to the nearest cent _____

3. Perform the indicated operations. (*Sections 4.3, 4.4, 4.5, and 4.6*)

a) $92 + 7.6 + 0.013 + 12.53$

b) $40 - 3.88$

c) $(0.0053)(8.4)$

d) $100.8 \div 1.8$

4. Arrange the numbers in order from smallest to largest. (Section 4.7)

a) $0.33, 0.352, \frac{7}{20}, 0.329$

5. At a flea market Joan sold a table for \$72.45 and a chair for \$12.90. If it cost her \$20.50 for the rental of the stall, how much money did she have left? (Sections 4.3 and 4.4)

6. If it costs \$11.84 for 6.4 feet of ribbon, what is the cost per foot? (Section 4.5)

7. Use order of operations to simplify. (Section 4.6)

$$(3.2)^2 + (4.2)(1.9) - 8.4$$

8. Decide whether the following proportions are true or false. (Section 5.3)

a) $\frac{9}{15} = \frac{27}{45}$

b) $\frac{1.6}{2.2} = \frac{6.4}{8.4}$

9. Find the missing number in each proportion. Round to the nearest hundredths, if necessary. (*Section 5.4*)

a) $\frac{x}{12} = \frac{45}{60}$

b) $\frac{8}{3\frac{1}{2}} = \frac{x}{9}$

10. Circle the correct proportion for this application problem. (*Section 5.5*)

Carrie peels 40 apples in 60 minutes. How long will it take her to peel 70 apples?

a) $\frac{60}{40} = \frac{70}{x}$

b) $\frac{60}{70} = \frac{40}{x}$

c) $\frac{40}{60} = \frac{x}{70}$

d) $\frac{40}{60} = \frac{70}{x}$

11. 7 out of 9 people prefer vanilla ice cream. If there are 540 people at a party, how many would want vanilla ice cream? (*Section 5.5*)

12. A 9-foot tree casts a shadow 6 feet long. How long will the shadow of a 5-foot tree be? (*Section 5.5*)

13. Write each percent as a decimal and each decimal as a percent. (*Section 6.1*)

a) $93\% =$ _____

b) $0.8 =$ _____

c) $0.473 =$ _____

d) $0.623\% =$ _____

14. Write each percent as a fraction in lowest terms and each fraction as a decimal. (*Section 6.2*)

a) $0.4\% =$ _____

b) $\frac{7}{20} =$ _____

c) $\frac{3}{5} =$ _____

d) $87.5\% =$ _____

15. Complete the chart. (*Sections 6.1 and 6.2*)

Fraction	Decimal	Percent
$\frac{1}{8}$		
	0.15	
		180%

16. The public radio station has raised 70% of its pledge goal. If the station has already collected \$17,500, what is its pledge goal? (Section 6.4)

17. The number of bus travelers dropped from 12,000 to 9,000 in one year. Find the percent of decrease. (Section 6.4)

18. Find the amount of discount and the sale price if the original price is \$1,200 and the rate of discount is 25%. (Section 6.4)

19. Use one of the following words to complete the sentences. (Sections 6.1, 6.2, 6.3, and 6.4)

commission
100

interest
principle

sale price
sales tax

a) A percent is a ratio with a denominator of _____ .

b) _____ is a percent of the total sales charged as tax.

c) _____ is the percent of the dollar value of total sales paid to a salesperson.

d) The _____ is the amount of money on which interest is earned.

e) The _____ is the original price minus the discount.

20. You borrow \$7,000 from a credit union at 14% interest for 6 months. Find the total amount due on the loan. (Section 6.8)

21 Convert the following measurements.

a) 250 cm = _____ meters

b) 5 mm = _____ centimeters

c) 0.4 kg = _____ grams

d) 16 L = _____ milliliters

22. Pick the measurement that is most appropriate in each situation.

a) The water is almost boiling - 210°C 155°C 95°C

b) I hiked _____ this morning - 5cm 5mL 5kg 5km 5m

23. Use the conversion formula to convert 74°F to Celsius.

24. The rainiest place in the world receives approximately 460 inches of rain per year. Based on this amount, how much rain to the nearest foot would this place expect to receive per month?

Extra Credit (Worth 5 Points) (Section 6.4)

You deposit \$2,000 into a savings account earning 5% interest compounded annually. How much is in the account after 5 years?