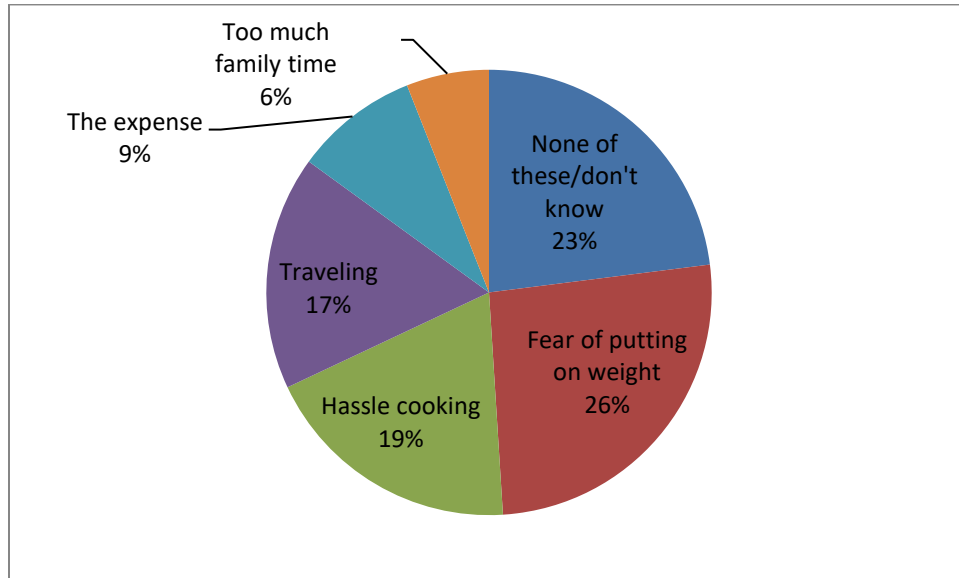# CCDM 105 Final Exam Review
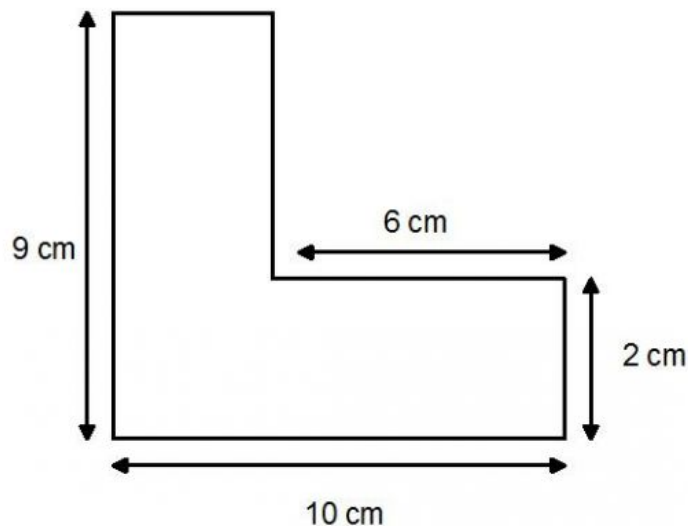
1. Add $540 + 67 + 481$

2. Round 1,658 to the nearest hundred

3. Divide: $5574 \div 13$ express your answer in remainder form

4. Multiply: 562×13

5. Jackson earned $48,678 in 12 months. Use front-end rounding to find how much he earned per month.

6. Find the prime factorization of 24

7. Simplify: $12 + 16 \div 4 - 2\,(3)$

8. Write in lowest terms $\dfrac{18}{24}$

9. Write $\dfrac{27}{12}$ as a mixed number

10. Write $5\dfrac{6}{7}$ as an improper fraction

11. Multiply: $\left(2\dfrac{2}{3}\right)\left(3\dfrac{3}{4}\right)$

12. Divide: $\dfrac{4}{25} \div \dfrac{8}{15}$

13. Add: $\dfrac{3}{7} + \dfrac{9}{14}$

14. Add: $2\dfrac{3}{4} + 5\dfrac{1}{3}$

15. Subtract: $10\dfrac{2}{5} - 5\dfrac{3}{5}$

16. Subtract: $\dfrac{6}{7} - \dfrac{4}{5}$

17. Convert 0.52 to a fraction in lowest terms

18. Add: $4.005 + 0.93$

19. Subtract: $17 - 5.27$

20. Multiply: $(2.68)(0.73)$

21. Divide: $3.78 \div 0.3$

22. Convert $\dfrac{5}{12}$ to a decimal round to the nearest hundredth.

23.   The stock market report says that 5 stocks went up for every 6 stocks that went down. If 750 stocks went down yesterday, how many went up?

24.   600 orders is what percent of 400 orders?

25.   400 people were asked what they disliked about the holidays the most. What portion of adults had a fear of putting on weight and too much family time?

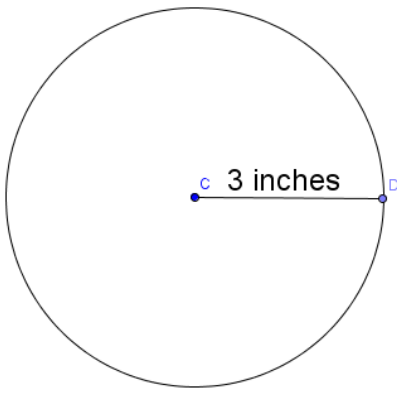**Thanksgiving Turnoffs: What adults dread most about the holiday.**

26.   What is the amount of tax on an item that costs $72, if the tax rate is 6%.

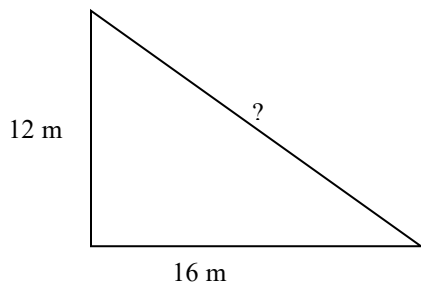27.   A TV that regularly sells for $320 is on sale for 20% off. What is the sale price

28.   Find the missing sides and the perimeter of the figure above.

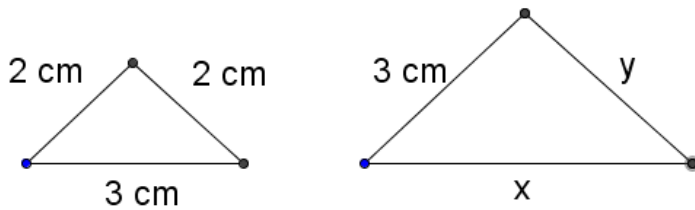29.   Find the area of the figure above.

30. Find the circumference of the circle.

c 3 inches D

31. Find the unknown length

12 m

?

16 m

32. Find the unknown lengths of the similar triangles.

2 cm   2 cm   3 cm   y

3 cm   x

33. Simplify: $5 + (-3) + 8 + (-7)$

34. Simplify: $6 - (-10)$

35. Multiply: $(-3)(-4)(-7)(2)$

36. Add and simplify: $-\dfrac{3}{8} + \dfrac{11}{16}$

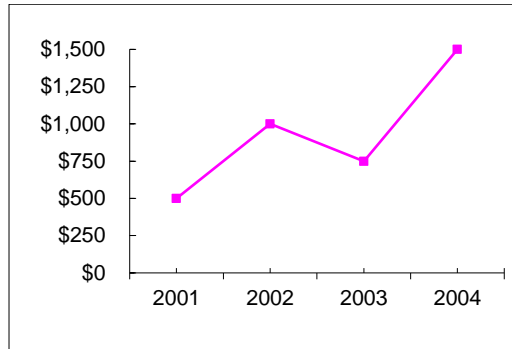37. Subtract and simplify: $-\dfrac{5}{6} - \dfrac{3}{4}$

38. Subtract and simplify: $-\left(-\dfrac{2}{3}\right) - \dfrac{4}{5}$

39. Multiply and simplify: $\left(-\dfrac{7}{12}\right)\left(\dfrac{9}{14}\right)$

40. Divide and simplify: $-\dfrac{21}{1} \div \dfrac{3}{8}$

41. Simplify: -4.009 + 0.73

42. Simplify: $7 - 32 \div 2^4 + (-2)$

43. Simplify: $-48 \div (-4)^2 + 3$

44. Simplify: $8 \div (-4) - 42 \div (-7)$

45. Simplify: $4 - (3^2) + 7(3 + 9) - (-6)$

46. Evaluate: $2x^2 - 3x + 5$ when $x = 3$

47. Simplify: $2(x - 3) - 5x + 10$

48. Solve: $2x - 5 = 9$

49. Solve: $2(y + 1) = 12$

50. Translate into an algebraic expression: *8 less than 5 times a number*

51. This table lists the number of overtime hours employees worked. Use the table to answer the questions below. Round to the nearest tenth if necessary.

Overtime hours for March	
Ray	8
Joe	9
Tony	10
Jean	19
Laura	2
Juan	3
Debbie	9
Sam	12.5
Jenny	8.5

a) Find the mean number of hours of overtime

b) Find the median number of hours of overtime

c) Find the mode for the overtime hours

52. The line graph below shows the annual sales of tennis rackets at the Sports-R-Us Store for each of four years.

a) In which year were the annual sales the lowest?

b) What was the decrease in annual sales from 2002 to 2003?

53. You are driving along and see that your tank is only $\frac{2}{7}$ full. The tank holds 10 gallons of gas. Your car goes $21\frac{1}{2}$ miles for every gallon of gas. How far can you drive before you run out of gas? Express your answer as simplified fraction or mixed number.

54. To conduct an experiment, a chemist cooled a substance to $-15^0 F$. During the experiment, a chemical reaction took place that raised the temperature of the substance by $20^0 F$. What was the final temperature?

55. Calculate Christopher's GPA by using the NMSU Grading Scale. Below are grades that Christopher earned in his first semester at DACC. Round the GPA to the nearest hundredth.

Grading Chart

A+   4.0
A   4.0
A-   3.7
B+   3.3
B   3.0
B-   2.7
C+   2.3
C   2.0
C-   2.0
D+   1.0
D   1.0
D-   1.0
F   0

Course	Credits	Grades
CCDM114N	4	A+
COLL101	3	B+
PSY	3	F
CCDE105	4	C-

CCDM 105 Final Exam Review-ANSWER KEY

1. 1088

2. 1700

3. 428 R10

4. 7306

5. $5,000 per month

6. $2 \cdot 2 \cdot 2 \cdot 3$ or $2^3 \cdot 3$

7. 10

8. $\dfrac{3}{4}$

9. $2\dfrac{1}{4}$

10. $\dfrac{41}{7}$

11. 10

12. $\dfrac{3}{10}$

13. $1\dfrac{1}{14}$

14. $8\dfrac{1}{12}$

15. $4\dfrac{4}{5}$

16. $\dfrac{2}{35}$

17. $\dfrac{13}{25}$

18. 4.935

19. 11.73

20. 1.9564

21. 12.6

22. 0.42

23. $x = 625$

24. 150%

25. 128 adults

26. $4.32

27. $256

28. 38 cm

29. 48 cm^2

30. 18.84 in

31. 20 m

32. $x = 4.5$ cm, $y = 3$ cm

33. 3

34. 16

35. - 168

36. $\dfrac{5}{16}$

37. $-\dfrac{19}{12}\, or\, -1\dfrac{7}{12}$

38. $-\dfrac{2}{15}$

39. $-\dfrac{3}{8}$

40. -56

41. -3.279

42. 3

43. 0

44. 4

45. 85

46. 14

47. $-3x + 4$

48. $x = 7$

49. $y = 5$

50. $5x - 8$

51.   a. 9 hours

        b. 9 hours

        c. 9 hours

52.   a. 2001

        b. $250

53. $61\frac{3}{7}$ or $\frac{430}{7}$ miles

54. $5^0 F$

55.   GPA 2.42