1. Aggie quarterback Tannehill completed

 13 out of 25 passes in the Thanksgiving

 Day game against UT. Write a proportion that could be used to find Tannehill’s percentage of completed passes in this game.

 7.3A

2. Alejandra has an 83 and a 74 on her first

two tests in math. Which equation can

be used to find *x*, the score she needs

on her next math test to have an 78 test

average in math?

 A $\frac{83+74+x}{3}=78$ B $\frac{83+74}{2}+x=78$

C $\frac{83+74+x}{2}=78$ D $\frac{83+74+78}{3}=x$

 7.5B

3. Amanda used a balance to show the equation 2x + 3 = 11. What should be the first step to find *x*?

x

x

 A Remove 2x from each side

 B Add 3 circles to each side

 C Divide the 14 circles equally among the *x* models

 D Subtract 3 circles from each side

 7.5A

4. Which sequence follows the rule

 6n – 4, in which n represents the position of the term in the sequence?

|  |  |  |
| --- | --- | --- |
| x | Work Process | Y |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 A -2, -8, -14, -20, -26,…

 B 2, 8, 16, 26, 32,…

 C -18, -12, -6, 0, 6,…

 D 2, 8, 14, 20, 26,…

 7.4C

5. Look at the given equation:

 $\frac{x }{4}=48$

 What is the value of *x*?

 7.5A

6. Which rule can be used to find the value of any term in the sequence below where *n* represents the position of the term?

|  |  |
| --- | --- |
| Position, n | Value of term |
| 1 | 5 |
| 2 | 8 |
| 3 | 11 |
| 4 | 14 |
| 5 | 17 |
| n | ? |

 A *n* + 3

 B 3n + 2

 C 6*n* – 1

 D 5n

 7.4C

7. Jerry missed 20% of the questions on his third six weeks reading test. If the test had 60 questions on it, then *how many questions* did Jerry answer correctly?

 7.3A

8. What are the coordinates of point Q?

**1**

**1**

**-1**

**-1**

**Q**

 7.7A

9. Look at the given equation.

 $x -7 =-18$

 What is the value of *x*?

 7.5A

10. Each Skittles bag is 20% red, 20% yellow, 20% orange, 20% purple, and 20% green. If Mariah’s bag of Skittles has 80 green Skittles, then how many total Skittles are in the bag?

 7.3A

11. Which sequence follows the rule

 4(n - 1), in which n represents the position of the term in the sequence?

|  |  |  |
| --- | --- | --- |
| x | Work Process | Y |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 A 0, -4, -8, -12, -16

 B 3, 7, 11, 15, 19,…

 C 0, 4, 8, 12, 16,…

 D 4, 8, 12, 16, 20…

 7.4C

12. Which graph is NOT proportional?

B

A

D

C

 7.3B

13. Mary is m years old. Kirk’s age, k, is

 three less than twice Mary’s age. Which

equation represents Kirk’s age?

A $ k=3-2m$ C $ k=2m-3$

B $ k=2m+3$ D $ k= 2(m-3)$

 7.5B

14. Look at the given equation:

 $8x -12 =92$

 What is the value of *x*?

 7.5A

15. The chart below shows the cost of candy

bars at Dollar General.

|  |  |  |
| --- | --- | --- |
| x, # of candy bars | MathematicalProcess | y, cost of candy bars |
| 0 |  | 0 |
| 1 |  | $0.60 |
| 2 |  | $1.20 |
| 3 |  | $1.80 |
| 4 |  | $2.40 |
|  |  |  |
| x | (description) | (equation)Y = ? |

Which equation can be used to find y, the cost of any number, x, candy bars?

A y = 0.60x C y = x + 0.60

B y = 60x D y = x $÷$ 0.60

7.3B

16. Bobby made 19 out of 25 shots that he attempted in the basketball game last night. What percentage of shots did Bobby make?

A 14%

B 60%

C 70%

D 75%

(7.3A)

17. If the polygon in the grid below is translated to the left 4 units and down 2 units, what will be the coordinates of point H’?



 7.7B

18. Three friends went to Pizza Hut after the game; the total bill was $42. Zach paid

 $\frac{1}{3}$ of the bill, David paid 20% of the bill, and Hamilton paid the rest. How much did EACH person pay?

(7.3A)

19. Look at the four coordinate planes

 below. Give the coordinates of point P

 for EACH graph.

**1**

**1**

**-1**

**-1**

**P**

**1**

**1**

**-1**

**-1**

**P**

**1**

**1**

**-1**

**-1**

**P**

**1**

**1**

**-1**

**-1**

**P**

A

B

C

D

7.7A

20. Jeff ate several Hershey miniature candy

bars: 2 regular Hershey bars, 3 Special

Dark bars, 1 Mr. Goodbar, and 2 Krackle

bars. What percent of Jeff’s candy bars

were NOT Special Dark bars?

A 37.5%

B 12.5%

C 62.5%

D 60%

7.3A

21. Which rule can be used to find the value of any term in the sequence below where *n* represents the position of the term?

 Sequence: 1, 6, 11, 16, 11, . . . *n*

|  |  |  |
| --- | --- | --- |
| x | Work Process | Y |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 A y = *x* + 5

 B y = 4*x* – 3

 C y = 5*x* + 4

 D y = 5*x* – 4

 7.4C

22. XYZ will be reflected across the

 X-AXIS.

 What will be the coordinates of Z’ ?



 7.7B

23. Which rule can be used to find the value of any term in the sequence below where *n* represents the position of the term?

Sequence: 0.75, 1.50, 2.25, 3, 3.75, . . .*n*

|  |  |  |
| --- | --- | --- |
| x | Work Process | Y |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 A y = 4x C y = $\frac{1}{4}$x

 B Y = $\frac{3}{4}$x D y = $\frac{1}{2}$x

 7.4C

24. Look at the given equation.

$$\frac{78 ∙4 -62}{3}=x$$

 Which problem below is represented by

 this equation?

 A Liz had a 78 average on her first

 5 quizzes in Reading. She made a 62

 on her next quiz. Find x, Liz’s

 new quiz average in Reading.

 B Joe had a 78 on his first 5 quizzes

 in Reading. Mrs. Lamb dropped

 Joe’s lowest quiz grade, which

 was a 62. Find x, Joe’s new quiz

 average in Reading.

 C Wes had a 78 average on his first 4

 quizzes in Reading. Ms. Smith

 dropped Wes’ lowest quiz grade,

 which was a 62. Find x, Wes’ new

 quiz average in Reading.

 D Mike earned $78 per week for 5

 weeks. He spent $62. Find x, the

 amount of money that Mike has left.

7.5B

25. Alyssa answered 27 out of 30

 questions correctly on her math test.

 What percent of the questions did she answer correctly?

(7.3A)

26. XYZ will be reflected across the

 Y-AXIS.

 What will be the coordinates of the vertices $∆$ X’, Y’, Z’?



 7.7B

27. The Calallen Wildcat varsity boys basketball team made 60% of their free throws in the last game. If the team made 18 free throws, then how many free throws did they attempt?

 (7.3A)

28. Taylor translated PQR to be P’Q’R’. Vertex P was at (-5, -3).



 If vertex P’ is at (-1, -5), which best describes this translation?

 A Move 4 units left and 2 units up

 B Move 4 units left and 2 units down

 C Move 4 units right and 2 units up

 D Move 4 units right and 2 units down

 7.7B

29. 15 students are on the journalism

 team that creates the CMS Paw Print.

 60% of these students are 8th graders.

 How many of the students that create

 the Paw Print are 8th grade students?

 (7.3A)

30. The table below shows the time and

 distance traveled by the Smith family

 to go to a family reunion last summer.

 If Mr. Smith continued to drive at this

 steady rate, then how many

 miles did the family travel in 7 hours?

|  |  |  |
| --- | --- | --- |
| # of hours, x | Mathematical Process | # of Miles, y |
| 0 |  | 0 |
| 1 |  | 60 |
| 2 |  | 120 |
| 3 |  | 180 |
|  |  |  |
| 8 |  | ? |
| N | (description) | (equation) |

7.3B

31. A circle with a radius of 2 has its center at (-4, 3). If the circle is translated 6 units to the right and 2 units up, then what are the coordinates of its NEW CENTER?



 7.7B

32. GRID C #1: Ms. Sailor bought a 6-foot

Christmas tree at Lowe’s for $47. She also had to pay an 8% sales tax. How much did Ms. Sailor pay altogether for the Christmas tree?

 Record your answer and fill in the bubbles on your answer document.

 Be sure to use the correct place value.



7.3A

33. GRID C #2: Look at the given equation.

$$3x +12 =120$$

 What is the value of x?

 Record your answer and fill in the bubbles on your answer document.

 Be sure to use the correct place value.



7.5A

Pre-AP Supplement

NOTE: Make sure that you leave the row of “bubbles” for #32 and #33 on the front of the scan-tron blank and start these

Pre-AP problems on #34.

34. If n represents a terms position in a

 sequence, then find the rule that

 describes the following sequence:

 19, 16, 13, 10, 7, …

 A -3n – 16

 B -3n + 22

 C 20n – 1

 D -3n + 16

 7.4C

35. Solve: $\frac{x}{6}$ – 27 = -3

7.5A

36. Which graph is NOT proportional?

I

II

III

IV

 7.3B

37. Grid C #3

 Ms. Smith bought a giant bag of M&Ms to make M&M chocolate chip cookies. She counted 51 green M&Ms. If 15% of the bag of M&Ms are green and 20% of the bag of M&Ms are blue, then how many BLUE M&Ms are in the bag?

 Record your answer and fill in the bubbles on your answer document.

 Be sure to use the correct place value.



7.3A