April 20th

Name Date

Practice by Objective

8.1.2 PA. A. 4. 2 and 4. 3

1 What is the solution for the inequality shown below?

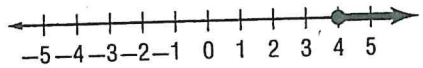
$$-15 < a + 15$$

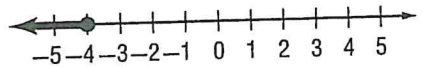
A $a > -30$
B $a < -30$
C $a < 30$
D $a < 0$

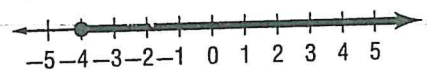
2 Which numberline represents the solution to the inequality below?

$$5 - 3x \geq 17$$

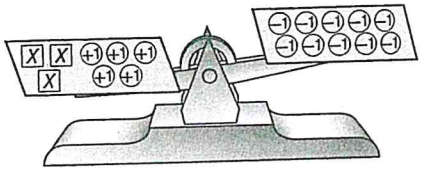
A


B


C


D


3 The scale below models an inequality. The farther down the scale is, the greater the value. What is the solution to the inequality?



A $x > -\frac{5}{3}$
B $x < -\frac{5}{3}$
C $x > -5$
D $x < -5$

4 Which inequality could be used to represent the situation "4 less than three times a number h is greater than 45"?

A $3 - 4 \geq 45$
B $4h - 3 < 45$
C $3h - 4 > 45$
D $45 - 4 < 3h$

April 20th

Name KEY Date

Practice by Objective

8.1.2

PA. A. 4.2 and 4.3

Solve just like you would an equation.

1 What is the solution for the inequality shown below?

$$-15 < a + 15$$

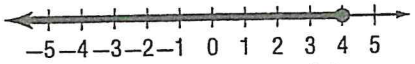
(A) $a > -30$
B $a < -30$
C $a < 30$
D $a < 0$

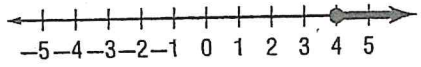
$-15 < a + 15$
$-15 \quad -15$
$-30 < a$

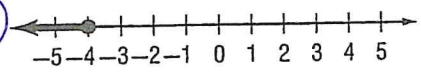
$a > -30$

2 Which numberline represents the solution to the inequality below?

$$5 - 3x \geq 17$$

A 

B 

(C) 

D 

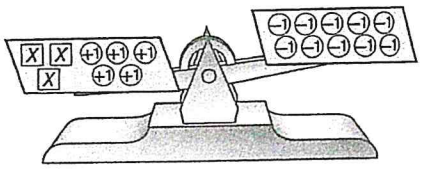
$5 - 3x \geq 17$
$-5 \quad -5$

$-3x \geq 12$
$\frac{-3x}{-3} \geq \frac{12}{-3}$

$x \leq -4$

3 The scale below models an inequality. The farther down the scale is, the greater the value. What is the solution to the inequality?

write what you see –



A $x > -\frac{5}{3}$
B $x < -\frac{5}{3}$
(C) $x > -5$
D $x < -5$

$3x + 5 > -10$
$-5 \quad -5$

$\frac{3x}{3} > \frac{-15}{3}$

$x > -5$

4 Which inequality could be used to represent the situation "4 less than three times a number h is greater than 45"?

A $3 - 4 \geq 45$
B $4h - 3 < 45$
(C) $3h - 4 > 45$
D $45 - 4 < 3h$

Remember anytime you multiply or divide by a negative # you must reverse the inequalities.

April 21st

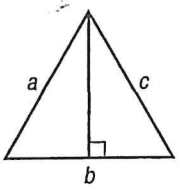
Name Date

Practice by Objective

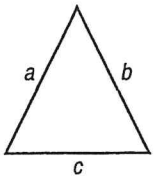
8.3.2 PA. GM 1.0 1 and 1.02

1 **For which triangle is the relationship $a^2 + b^2 = c^2$ true?**

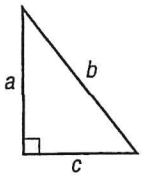
A



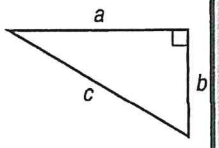
C



B



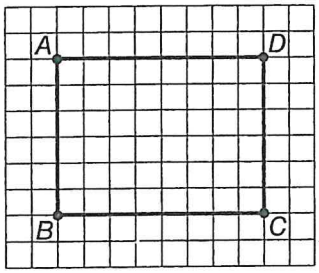
D



3 **One leg of a right triangle measures 9 cm and its hypotenuse measures 12 cm. What is the length of the other leg?**

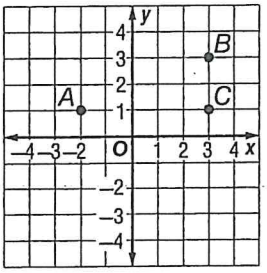
A 1.7 centimeters
B 7.9 centimeters
C 9.1 centimeters
D 11.6 centimeters

2 **What is the length of segment $\overline{BD}$ in the diagram?**



A 6 units
B 8 units
C 10 units
D 12 units

4 **How much shorter is the direct path from A to B than the path that goes from A to C to B?**



A 1.6 units
B 2.9 units
C 4.4 units
D 5.4 units

April 21st

Name Key Date

Practice by Objective

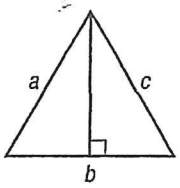
8.3.2

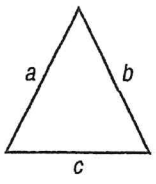
PA. GM 1.1 and 1.2

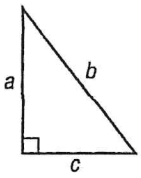
a, b = legs; c = hypotenuse "longest of all sides"

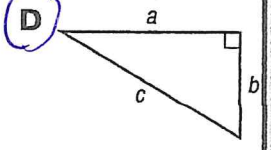
pythagorean theorem $a^2+b^2=c^2$ is for right triangles

1 For which triangle is the relationship $a^2 + b^2 = c^2$ true?

A 

C 

B 

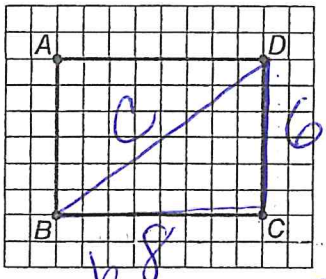
D 

3 One leg of a right triangle measures 9 cm and its hypotenuse measures 12 cm. What is the length of the other leg?

$a^2+b^2=c^2$
$9^2+b^2=12^2$
$81+b^2=144$
$-81 \quad -81$
$b^2=63$
$b=\sqrt{63}$

A 1.7 centimeters
B 7.9 centimeters
C 9.1 centimeters
D 11.6 centimeters

2 What is the length of segment $\overline{BD}$ in the diagram?

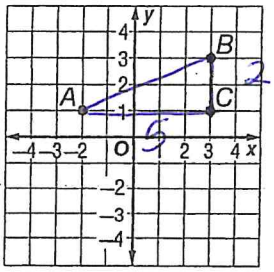


c
6 a
b 8

$a^2+b^2=c^2$
$6^2+8^2=c^2$
$36+64=c^2$
$100=c^2$
$\sqrt{100}=c=10$

A 6 units
B 8 units
C 10 units
D 12 units

4 How much shorter is the direct path from A to B than the path that goes from A to C to B?



A 1.6 units
B 2.9 units
C 4.4 units
D 5.4 units

$a^2+b^2=c^2$
$2^2+5^2=c^2$
$4+25=c^2$
$29=c^2$
$\sqrt{29}=c \approx 5.385...$

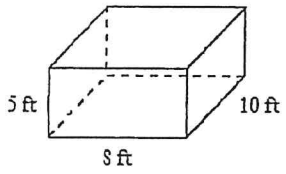
A to C to B = 5 + 2 = 7
A to B ≈ 5.385

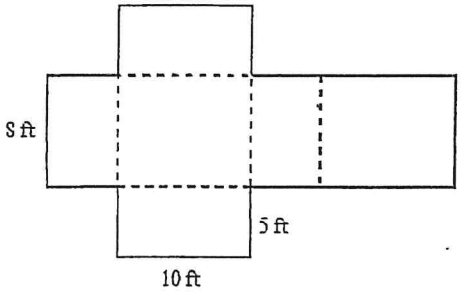
April 22nd

NAME_____

OAS PA.GM.2.1 and 2.2

(1) Use the net to find the surface area of the rectangular prism.





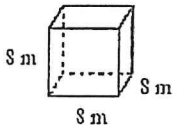
A. 400 ft^2

B. 170 ft^2

C. 85 ft^2

(D.) 340 ft^2

(2) find the surface area of the cube.



(A.) 384 m^2

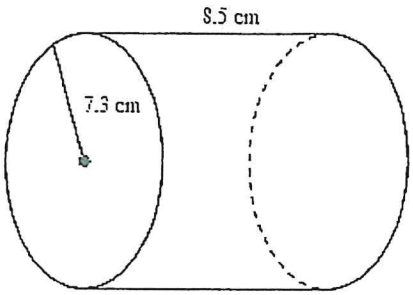
B. 512 m^2

C. 192 m^2

D. 256 m^2

3

What is the surface area of the cylinder? Use 3.14 for π and round the answer to the nearest square centimeter.



(not drawn to scale)

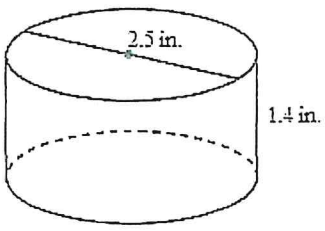
A. $724\ cm^2$

B. $1{,}422\ cm^2$

C. $362\ cm^2$

D. $229\ cm^2$

4



A. $43\ in^2$

B. $13\ in^2$

C. $21\ in^2$

D. $10\ in^2$

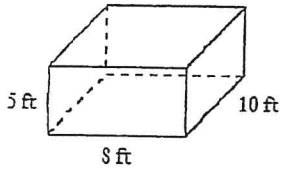
Surface Area is calculated in square units, like ft^2

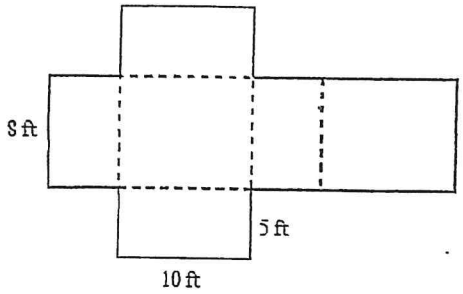
April 22nd

NAME KEY

OAS PA.GM.2.1 and 2.2

(1) Use the net to find the surface area of the rectangular prism.





$l = 8$
$w = 10$
$h = 5$

A. 400 ft^2

B. 170 ft^2

C. 85 ft^2

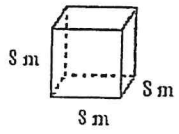
(D.) 340 ft^2

SA of rectangular prism $= 2lw + 2lh + 2wh$

$= 2(8 \cdot 10) + 2(8 \cdot 5) + 2(10 \cdot 5)$

$=$

(2) find the surface area of the cube.



$SA = 2lw + 2lh + 2wh$

$= 2(8 \cdot 8) + 2(8 \cdot 8) + 2(8 \cdot 8)$

$=$

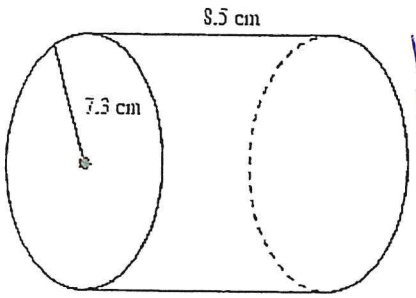
(A.) 384 m^2

B. 512 m^2

C. 192 m^2

D. 256 m^2

(3) What is the surface area of the cylinder? Use 3.14 for π and round the answer to the nearest square centimeter.



(not drawn to scale)

$r = 7.3$

$h = 8.5$

SA of cylinder $= 2\pi rh + 2\pi r^2$

$= 2(3.14) \cdot 7.3 \cdot 8.5 + 2(3.14) \cdot 7.3^2$

$= 724.3352$

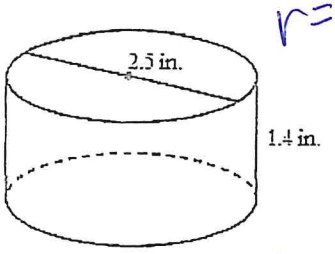
A. $724\ cm^2$

B. $1{,}422\ cm^2$

C. $362\ cm^2$

D. $229\ cm^2$

(4)



$r = 1.25$

$h = 1.4$

$SA = 2\pi rh + 2\pi r^2$

$= 2 \cdot 3.14 \cdot 1.25 \cdot 1.4 + 2 \cdot 3.14 \cdot 1.25^2$

$= 20.8025$

A. $43\ in^2$

B. $13\ in^2$

C. $21\ in^2$

D. $10\ in^2$

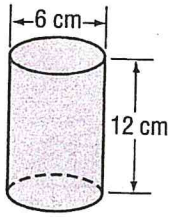
April 22nd

Name Date

Practice by Objective

8.4.1 PA.GM.2.1 and 2.2

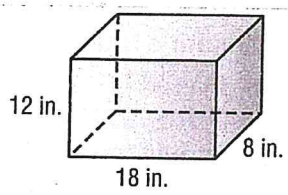
1 **Sean is making a kaleidoscope from the tube shown.**



How much contact paper would he need to cover the top, the bottom and the side of the tube?

A 216π sq cm
B 90π sq cm
C -54π sq cm
D -72π sq cm

2 **The figure below shows a rectangular prism. What is the surface area of the prism?**



A 750 sq in.
B 825 sq in.
C 912 sq in.
D 1020 sq in.

April 22nd

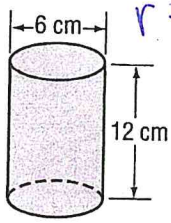
Name Kay Date

Practice by Objective

8.4.1

PA. GM. 2.1 and 2.2

1 **Sean is making a kaleidoscope from the tube shown.**



r = 3

h = 12

$SA = 2\pi rh + 2\pi r^2$

$= 2\pi \cdot 3 \cdot 12 + 2\pi \cdot 3^2$

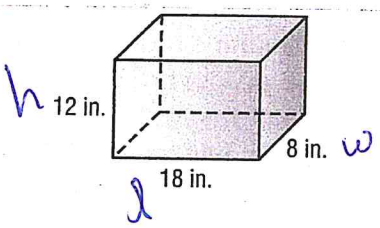
$= 90\pi$

How much contact paper would he need to cover the top, the bottom and the side of the tube?

A 216π sq cm
B 90π sq cm
C -54π sq cm
D -72π sq cm

indicates leaving answer in terms of π.

2 **The figure below shows a rectangular prism. What is the surface area of the prism?**



$SA = 2lw + 2lh + 2wh$

$= 2(18 \cdot 8) + 2(18 \cdot 12) + 2(8 \cdot 12)$

$= 912$

A 750 sq in.
B 825 sq in.
C 912 sq in.
D 1020 sq in.

April 23rd

NAME_____

OAS PA.GM.2.3 and 2.4

(1) A rectangular prism has dimensions of 8 m, 10 m, and 12 m. What is the volume of the prism?

A. 308 m^3

B. 960 m^3

C. 970 m^3

D. 120 m^3

(2) A cube measures 19 feet along each edge. What is the volume of the cube?

A. 6,859 ft^3

B. 6,959 ft^3

C. 1,083 ft^3

D. 57 ft^3

(3) A rectangular prism has a base area of 171 square feet. The height of the prism is 8 feet. What is the volume of the prism?

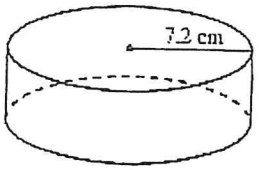
A. 29,305 ft^3

B. 1,368 ft^3

C. 1,378 ft^3

D. 179 ft^3

(4) What is the volume of the cylinder? Use 3.14 for π.



(not drawn to scale)

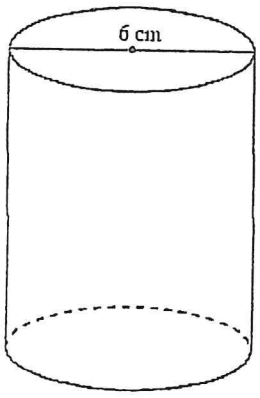
A. 162.78 cm^3

B. 499.41 cm^3

C. 782.26 cm^3

D. 765.05 cm^3

(5) What is the volume of the cylinder? Use 3.14 for π.



(not drawn to scale)

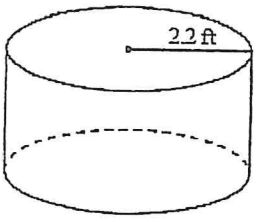
A. 65.94 cm^3

B. 197.82 cm^3

C. 28.26 cm^3

D. 461.58 cm^3

(6) What is the volume of the cylinder? Use 3.14 for π.



(not drawn to scale)

A. 36.54 ft^3

B. 34.95 ft^3

C. 69.91 ft^3

D. 15.89 ft^3

Volume is calculated in cubed units, like m^3

April 23rd

NAME_____

OAS PA.GM.2.3 and 2.4

(1) A rectangular prism has dimensions of 8 m, 10 m, and 12 m. What is the volume of the prism?

A. 308 m^3
(B) 960 m^3
C. 970 m^3
D. 120 m^3

V of rectangular prism $= l \cdot w \cdot h$
$= 8 \cdot 10 \cdot 12$
$= 960$

(2) A cube measures 19 feet along each edge. What is the volume of the cube?

(A) 6,859 ft^3
B. 6,959 ft^3
C. 1,083 ft^3
D. 57 ft^3

$V = l \cdot w \cdot h$
$= 19 \cdot 19 \cdot 19$
$= 6859$

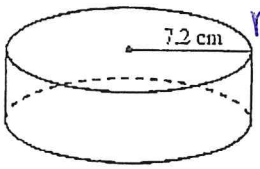
(3) A rectangular prism has a base area of 171 square feet. The height of the prism is 8 feet. What is the volume of the prism?

A. 29,305 ft^3
(B.) 1,368 ft^3
C. 1,378 ft^3
D. 179 ft^3

$V = B \cdot h$
$= 171 \cdot 8$
$= 1368$

(4) What is the volume of the cylinder? Use 3.14 for π.

V of cylinder $= \pi r^2 h$
$= 3.14 \cdot 7.2^2 \cdot 4.7$



(not drawn to scale)

A. 162.78 cm^3

B. 499.41 cm^3

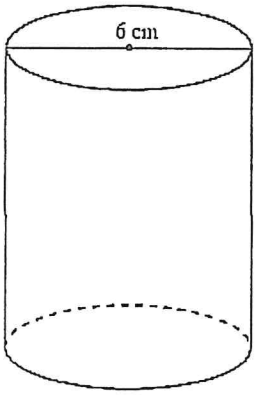
C. 782.26 cm^3

(D.) 765.05 cm^3

(5) What is the volume of the cylinder? Use 3.14 for π.

$r = 3$

$V = \pi r^2 h$
$= 3.14 \cdot 3^2 \cdot 7$



(not drawn to scale)

A. 65.94 cm^3

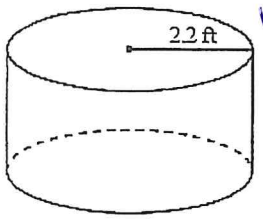
(B.) 197.82 cm^3

C. 28.26 cm^3

D. 461.58 cm^3

(6) What is the volume of the cylinder? Use 3.14 for π.

$V = \pi r^2 h$
$= 3.14 \cdot 2.2^2 \cdot 2.3$



(not drawn to scale)

A. 36.54 ft^3

(B.) 34.95 ft^3

C. 69.91 ft^3

D. 15.89 ft^3

April 24th

Name Date

Practice by Objective

8.5.3 PA.D.1.1

1 During the past winter the Bender family had monthly heating bills of $79, $146, $212, $149 and $212. Which measure makes the bills appear the highest?

A mean
B median
C mode
D range

2 The Oklahoma Sooner football teams from 2000–2008 won the following number of football games.

13, 11, 12, 12, 12, 8, 11, 11, 12

Which two measures are the same for this data set?

A mean and median
B median and mode
C mode and mean
D range and mean

3 The following table shows the temperature highs in Oklahoma City for the first five days of the month of May. For the set of data, which measure is the greatest?

Day	Temperature (°F)
1	79°
2	57°
3	62°
4	64°
5	62°

A mean
B median
C mode
D range

4 Atohi read books with the following number of pages.

162, 234, 178, 320, 178, 186

What is the mean of the number of pages of the books he read?

A 178
B 182
C 186
D 210

April 24th

Name KEY Date

Practice by Objective

8.5.3

PA. D.1.1

1 During the past winter the Bender family had monthly heating bills of $79, $146, $212, $149 and $212. Which measure makes the bills appear the highest?

A mean = 159.6
B median = 146
C mode = 212
D range = 133

2 The Oklahoma Sooner football teams from 2000–2008 won the following number of football games.

13, 11, 12, 12, 12, 8, 11, 11, 12

Which two measures are the same for this data set?

A mean and median
B median and mode
C mode and mean
D range and mean

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162, 234, 178, 320, 178, 186

What is the mean of the number of pages of the books he read?

A 178
B 182
C 186
D 210

mean is the average - add up the data and divide by the number of data items.

median is the middle # when data is in order.

mode is the # that occurs the most

range is highest value minus lowest value