

Mental Math

Grade 9 Mathematics (10F)

D-1

Strand: Measurement

Specific Learning Outcome: 9.SS.1

General Questions

1. Add: $1050 + 40 + 12$
2. In a class of 16 students, 75% wear sandals. How many students does that represent?
3. How many metres are equivalent to 49.1 km?
4. If gasoline costs 99¢ per litre, how much would 30 litres cost (in dollars)?
5. Evaluate: $\sqrt{25}$
6. If 7 boxes of candy are \$3.50, how much are 4 boxes?

Answers

1102

12 students

49 100 m

\$29.70

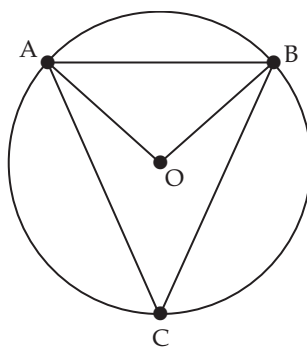
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\$2.00

Unit Questions

Use the circle below to answer questions 7 to 10.

7. Name a central angle.
8. Name an inscribed angle of arc AB.
9. Name a chord.
10. Name a minor arc.



$\angle AOB$ or $\angle BOA$

$\angle ACB$ or $\angle BCA$

\overline{AB} or \overline{AC} or \overline{BC}

\widehat{AB} or \widehat{BC} or \widehat{AC}

Other Questions

11.

12.

Mental Math

Grade 9 Mathematics (10F)

D-2

Substrand: Measurement

Specific Learning Outcome: 9.SS.1

General Questions

1. If you deposit one cheque for \$35 and a second cheque for \$49, then withdraw an amount of \$24, how much more money will you have in your account?
2. At 25¢ per minute for a long-distance telephone call, how much will you pay for a call that lasts 35 minutes?
3. Choosing a person at random, what is the probability that the person was born on a Monday?
4. Which fraction is larger: $\frac{1}{4}$ or $\frac{1}{3}$?
5. What is the total cost of 7 pencils at 13¢ each?
6. If a vintage video game originally worth \$60 increases in cost by 15%, what is the new cost of the video game?

Answers

\$60

\$8.75

$\frac{1}{7}$

$\frac{1}{3}$

91¢

\$69

Unit Questions

7. What is the measure of a right angle?
8. The measure of a central angle is _____ the measure of an inscribed angle that is subtended by the same arc.
9. All inscribed angles that are subtended by the same arc are _____.
10. What is the measure of the angle formed between a tangent line and a radius segment at the point of tangency?

90°

two times

congruent

90°

Other Questions

11.

12.

Mental Math

Grade 9 Mathematics (10F)

D-3

Substrand: Measurement

Specific Learning Outcome: 9.SS.1

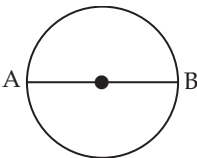
General Questions

1. If the delivery fee of a \$650 couch is 1%, what is the amount of the fee?
2. Estimate: 49×61
3. What two numbers have a product of 24 and a sum of 11?
4. What is the total cost of a \$430 ticket if you also pay a \$34 tax and a \$60 delivery fee?
5. What number is 86 more than 33?
6. What is the area of a rectangular field that measures 50 m by 30 m?

Answers

- \$6.50
- ≈ 3000
- 3 and 8
- \$524
- 119
- 1500 m^2

Unit Questions

7. What is the measure of an inscribed angle subtended by a semicircle?
8. Determine the radius of the following circle if $AB = 7.5 \text{ cm}$.

9. The measure of an inscribed angle is _____ the measure of the central angle subtended by the same arc.
10. A central angle measures 64° . What is the measure of an inscribed angle subtended by the same arc?

- 90°
- 3.75 cm
- half
- 32°

Other Questions

- 11.
- 12.

Mental Math

Grade 9 Mathematics (10F)

D-4

Substrand: Measurement

Specific Learning Outcome: 9.SS.1

General Questions

- Evaluate: $\frac{1}{3} + \frac{1}{8}$
- Julia must pay \$3000 in 6 equal payments. What is the value of each payment?
- How much are 5 doughnuts if one doughnut costs 24¢?
- In a group of 120 students, 20% play squash. How many students does that represent?
- What is the median of the following set of numbers: 64, 82, 70, 73, 91?
- Keegan is 27 years old in 2014. In what year was he born?

Answers

$$\frac{11}{24}$$

\$500

\$1.20

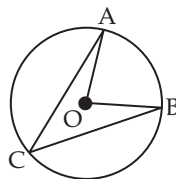
24 students

73

1987

Unit Questions

- In the circle with centre O , $\angle ACB$ measures 40° . What does $\angle AOB$ measure?

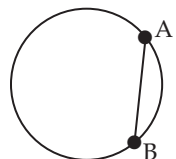


80°

- An arc that measures less than half of a circle is called a _____ arc.

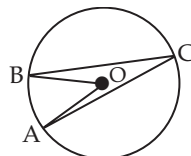
minor

- What term is used to describe line segment \overline{AB} ?



chord

- If $\angle AOB$ is 42° , what is the measure of $\angle ACB$?



21°

Other Questions

11.

12.

Mental Math

Grade 9 Mathematics (10F)

D-5

Substrand: Measurement

Specific Learning Outcome: 9.SS.1

General Questions

1. You want to make a trip from Winnipeg to Paris. If Winnipeg to Montreal is 3.5 hours and Montreal to Paris is 7.75 hours, how long is your flight?
2. Estimate the value of $\sqrt{914}$.
3. What is the price of an orange if 5 oranges cost \$3.75?
4. Add: $\frac{1}{2} + \frac{1}{8}$
5. Write the expression that represents the product of a number and 5.
6. How many 5 kg bags can be filled with one 110 kg bag of potatoes?

Answers

11.25 hours

≈ 30

75¢

$\frac{5}{8}$

$5x$

22 bags

Unit Questions

7. The arc of a circle that is exactly half of the circle is called _____.
8. The circumference of a circle is 54 cm. What is the length of the semicircle arc?
9. What is the measure of an inscribed angle subtended by a semicircle?
10. The point on the circle where a radius segment and tangent line meet is called _____.

a semicircle

27 cm

90°

the point of tangency

Other Questions

11.

12.

Mental Math

Grade 9 Mathematics (10F)

D-6

Substrand: Measurement

Specific Learning Outcome: 9.SS.1

General Questions

1. Laura said, "My mother was 31 years old when I was born." If Laura is now 24 years old, how old is her mother?
2. What is the cost of 8 water bottles at 99¢ each?
3. If 20% of the 300 students at a school have lunch at home, how many students have lunch at school?
4. Which is lower: 13% of \$300 or \$32?
5. Richard's savings account balance was \$214 and he withdrew \$60. What is the new balance?
6. What is the lowest common denominator of $\frac{1}{3} + \frac{1}{9}$.

Answers

55 years old

\$7.92

240 students

\$32

\$154

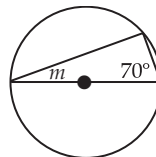
9 or ninths

Unit Questions

7. The line perpendicular to a radius segment at the point of tangency is called _____.

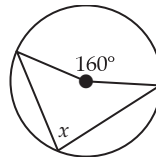
a tangent line

8. Write the measure of angle m .



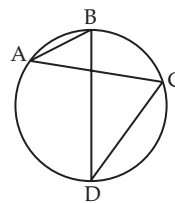
20°

9. Write the measure of angle x .



80°

10. In the circle shown, $\angle ABD$ measures 63° . Name the other angle that must also measure 63° .



$\angle ACD$ or $\angle DCA$

Other Questions

11.

12.