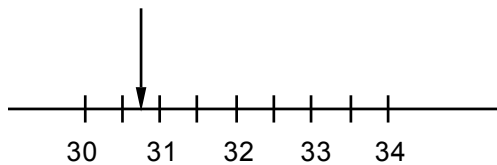


Name:

Class/Group:

Part I

1. What number is the arrow pointing at?



Answer: _____

(1/0/0)

2. Suppose that you take the bus at quarter to seven from Motala busstation. At what time can you expect to arrive at Linköpings resecentrum?

52

520

620

63

Motala–Borensberg/Fornåsa–Linköping

Express

Landsbygd

Måndag till fredag

LINJE	620	520	63	52	520	63	520	63	520	620	52	63	520	63	520	620	620	52
ANMÄRKNING																		
Mariebergs gård		5.15	5.25	5.35		6.05		6.35			6.45							8.50
Motalas busstation	5.20	5.25			5.45		6.15		6.45	6.50		7.12	7.13	7.42	7.43	8.00	8.45	
Stora Torget			5.35	5.45		6.15		6.45		6.55	7.15		7.45					9.00
Falkgatan		5.45		6.02	6.05		6.35		7.05		7.13		7.33		8.03			9.17
Borensberg		5.50		6.07	6.10		6.40		7.10		7.18		7.38		8.08			9.22
Österstad, Allévägen	5.33									7.03						8.13	8.58	
Fornåsa	5.40		5.51			6.31		7.01		7.12		7.31		8.01		8.20	9.05	
Klockrike	5.47									7.20						8.27	9.12	
Klockrike vägkors	X		5.57			6.37		7.07		X		7.37		8.07		X	X	
Vreta klosters kyrka	6.00									7.35						8.40	9.25	
Köpmansgränd				X							X							X
Gamla Linköping		X	X		X	X	X	X	X			X	X	X	X			
Linköpings resecentrum	6.20	6.25	6.25	6.47	6.45	7.05	7.20	7.35	7.52	7.55	8.05	8.05	8.16	8.35	8.46	9.00	9.45	10.05

Anmärkning

C

Startar från hållplats Mariebergs gård klockan 05.15, trafikerar hållplatserna Mariebergs gård, Violgatan, Västerkroken, Lyckornas centrum och Odalgatan.

J

Forsätter till Saab Civila porten via hållplatserna Vete-gatan och Råberga bro.

Bra att veta

Frågor om tider och priser?

Ring Trafikupplysningen 0771-21 10 10 eller gå in på www.ostgotatrafiken.se

Answer: _____

(1/0/0)

3. Which of the following numbers is the best approximate value for $25.6 \cdot 0.45$?
Circle your answer.

0.115

1.15

11.5

115

1150

(1/0/0)

4. Calculate one ppm of 9.4 million.

Answer: _____

(1/0/0)

5. Make an estimate of the scale used in this drawing. Show your solution in the figure and the box.



Answer: _____ (1/2/0)

6. The sum of a positive and a negative number is -2 .
What two numbers might they be?

Answer: _____ and _____ (0/1/0)

7. About how much is the area of the triangle? Circle your answer.

1 cm^2

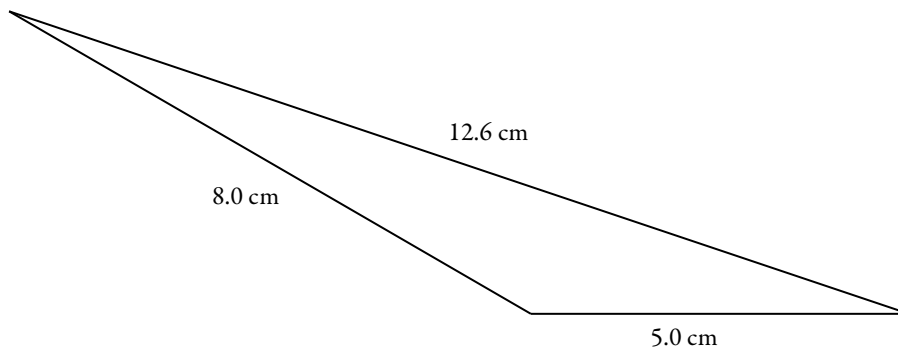
5 cm^2

10 cm^2

20 cm^2

26 cm^2

Explain your thinking in the figure and the box.



Box for explaining thinking:

(1/1/0)

8. Adam bought a used moped.

It cost 10 000 kr.

After x years the value of the moped is $10\,000 \cdot 0.8^x$.

What is the yearly percentage decrease?

Answer: _____ % per year

(2/0/0)

9. Stina runs 3 kilometers in 18 minutes.

What is her average speed in km/h?

Answer: _____ km/h

(0/2/0)

10. $x + 3 = a$ and $x - 3 = b$

Write an expression for $a - b$ and simplify it.

Answer: _____

(1/1/0)

11. Which of the following equations has/have no solution?

Circle your answer.

$x + 1 = 4$

$x + 2 = 0$

$1 + x = x - 1$

$2 = x$

$x - 5 = 2x - 7$

(0/0/1)

12. Calculate:

$$\frac{10^{102} + 10^{100}}{10^{100}}$$

Answer: _____

(0/0/2)

13. Circle the correct alternative.
Explain your reasoning in the box below.

$2x+3$ is $x+2$

always less than

always equal to

always greater than

for some x-values greater than

(0/1/1)