Name:	Date:
Question 1:  Solve the following trig equation; $8 \sin x° - 3 = 2, \quad 0 \leq x \leq 360°$	REL 1·5b Bronze Outcome 1
Question 2: Evaluate; $1\frac{1}{4} \div 3\frac{2}{7}$	APP 1·3b Gold Outcome 3
Question 3:  A house bought for £230 000. The value of the house appreciates at the rate of 14% for the first year and 3% in the second year. Calculate the value of the house after 2 years. 	APP 1·2a Gold Outcome 2
Question 4: Express this fraction in it's simplest form. $\frac{8x + 24}{x^2 + x - 6}$	E+F 1·3 Gold Outcome 1
Question 5: Write down the gradient and the y-intercept of the straight line with the following equation; $3y - 3x = 18$	REL 1·1a Gold Outcome 1
My score:	

Exam Questions

Question 1:

E+F 1·2a Gold Outcome 3

Multiply out the brackets and collect like terms.

$(3x + 2)(x^2 + 5x - 1)$ **3**

Question 2:

REL 1·1d Gold Outcome 1

Solve algebraically the system of equations

$2x - 5y = 24$
$7x + 8y = 33.$ **3**

Question 3:

REL 1·1e Silver Outcome 2

$$P = \frac{2(m-4)}{3}$$

Change the subject of the formula to m. **3**

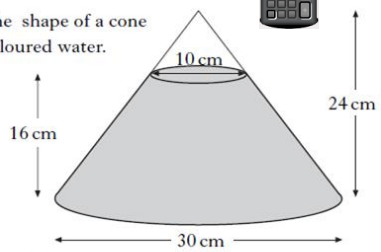
Question 4:

E+F 1·4c Silver Outcome 2

A glass ornament in the shape of a cone is partly filled with coloured water.

The cone is 24 centimetres high and has a base of diameter 30 centimetres.

The water is 16 centimetres deep and measures 10 centimetres across the top.

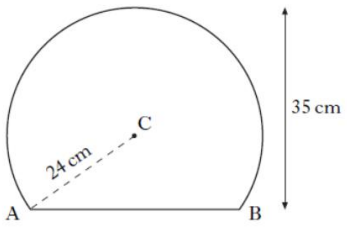


What is the volume of the water?
Give your answer correct to 2 significant figures. **5**

Question 5:

REL 1·4a Gold Outcome 1

A mirror is shaped like part of a circle.



The radius of the circle, centre C, is 24 centimetres.
The height of the mirror is 35 centimetres.

Calculate the length of the base of the mirror, represented in the diagram by AB. **3**

My score: