## Ex 26 Trig Equations

## Section A (Non-calculator)

1 Evaluate
a) $24.7-0.63 \times 30$
b) $3 \frac{1}{6} \div 1 \frac{2}{3}$
c) $1 \frac{3}{5}+2 \frac{4}{7}$

## Section B (Knowledge)

3 Sketch the "all-sin-tan-cos" quadrant diagram.
Use it to say if the following are positive or negative.
(i) $\sin 220^{\circ}$
(ii) $\cos 95^{\circ}$ (iii) $\tan 215^{\circ}$
(iv) $\cos 305^{\circ}$

4 Solve these equations, correct to 0.1 , for $0 \leq x \leq 360$ :
(a) $\sin x^{\circ}=0.9$
(b) $3 \cos x^{\circ}=1$
(c) $3 \tan x^{\circ}-5=0$

## Section C (Mixed)

5 Work out the area of this shape.


6 The weight, w kilograms, of a giraffe is related to its age, $M$ months, by the formula
$\frac{1}{4}\left(M^{2}-4 m+272\right)$
At what age will the giraffe weigh 83 kilograms?

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