



KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

UMKHANYAKUDE DISTRICT

GRADE 8 MATHEMATICS P2

NOVEMBER 2023

MARKING GUIDELINES

MARKS: 60

This consists of 3 pages including the cover page

QUESTION 1

1.1 = C √√

1.2 = D √√

1.3 = B √√

1.4 = D √√

1.5 = B √√

[10]

QUESTION 2

<p>2.1.1 $x = 62^\circ$opp sides opp angles are =</p> <p>$y + 62^\circ + 62^\circ = 180^\circ$sum of angles on a Δ</p> <p>$y = 56^\circ$</p>	<p>✓ S ✓ R ✓ S ✓ R ✓ Answer</p>
<p>2.1.2 $x + 4x + 2x + 40^\circ = 180^\circ$ sum of angles on a Δ</p> <p>$X = 28^\circ$</p>	<p>✓ S ✓ R ✓ Answer</p>
<p>2.1.3 $x + 90^\circ + 40^\circ = 180^\circ$sum of angles on a Δ</p> <p>$X = 50^\circ$</p> <p>$Y = 50^\circ$alt angles</p>	<p>✓ S ✓ R ✓ Answer ✓ S ✓ R</p>
<p>2.1.4 $x + 75^\circ + 55^\circ = 180^\circ$</p> <p>$x = 50^\circ$</p>	<p>✓ S ✓ R ✓ answer</p>

[16]

QUESTION 3

<p>3.1 $x + 30^\circ = 60^\circ$vert opp angles</p> <p>$X = 30^\circ$</p>	<p>✓ S ✓ R ✓ Answer</p>
<p>3.2 $2x - 30^\circ + 2x - 30^\circ + 2x - 30^\circ = 180^\circ$sum of angles on a triangle</p> <p>$6x - 90^\circ = 180^\circ$</p> <p>$6x = 270^\circ$</p> <p>$X = 45^\circ$</p>	<p>✓ S ✓ R ✓ 6x ✓ Answer</p>
<p>3.3 $x + 60^\circ + 4x - 30^\circ = 180^\circ$co-interior angles</p> <p>$5x = 150^\circ$</p> <p>$x = 30^\circ$</p>	<p>✓ S ✓ R ✓ 5x or 150° ✓ answer</p>

[11]

QUESTION 4

<p>4.1 $(25)^2 = (7)^2 + AB^2$pythagorus</p> <p>$625 - 49 = AB^2$</p> <p>$AB = 24$ units</p>	<p>✓ S ✓ R ✓ Answer</p>
<p>$(25)^2 = (20)^2 + DE^2$pythagorus</p> <p>$625 - 400 = DE^2$</p> <p>$DE = 15$ units</p>	<p>✓ S ✓ R ✓ Answer</p>

4.2 $(17)^2 = (11)^2 + RP^2$pythagorus $289 - 121 = RP^2$ $RP = 12,96$ units $(15)^2 = (9)^2 + ON^2$pythagorus $225 - 81 = ON^2$ $ON = 12$ units	✓ S ✓ R ✓ Answer ✓ S ✓ R ✓ Answer
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[12]

QUESTION 5

5.1 $P = 2l + 2b$ $= 2(7x + 3) + 2(9x + 3)$ $= 32x + 12$	✓ Correct formula ✓ Substitution ✓ $32x$ ✓ 12
5.2 $= 32(3) + 12$ $= 10$	✓ Correct formula ✓ Substitute 3 ✓ 10
5.3 $P = 22\text{cm} + 10\text{cm} + 11\text{cm} + 6\text{cm} + 11\text{cm} + 4\text{cm}$ $= 64\text{cm}$	✓ 11cm ✓ 4cm ✓ Addition ✓ Answer

[11]

TOTAL MARKS = 60