

Basic Angles and Shapes Practice #3

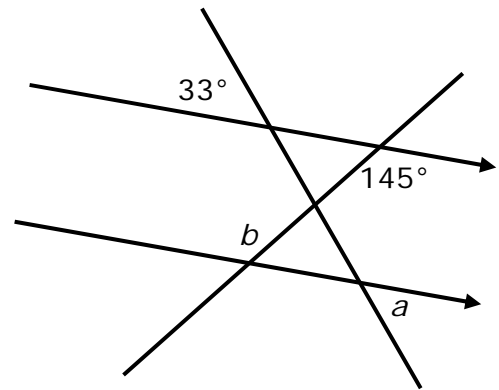
1.

Angle $a = \dots\dots\dots$

Reasons =

Angle $b = \dots\dots\dots$

Reason =



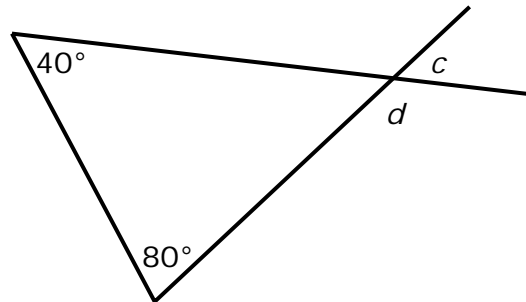
2.

Angle $c = \dots\dots\dots$

Reasons =

Angle $d = \dots\dots\dots$

Reason =



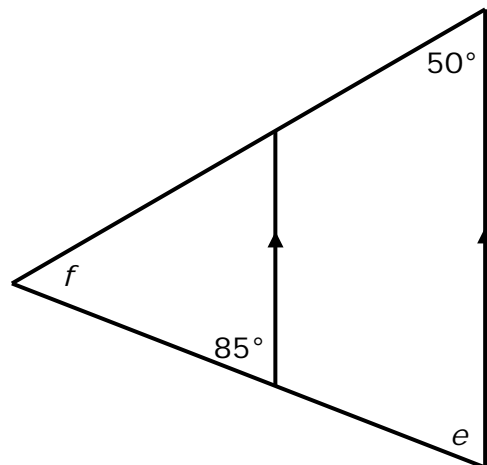
3.

Angle $e = \dots\dots\dots$

Reason =

Angle $f = \dots\dots\dots$

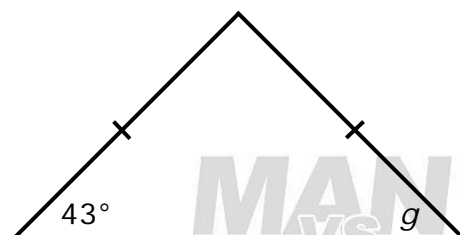
Reason =



4.

Angle $g = \dots\dots\dots$

Reasons =



Answers: Basic Angles and Shapes Practice #3

1.

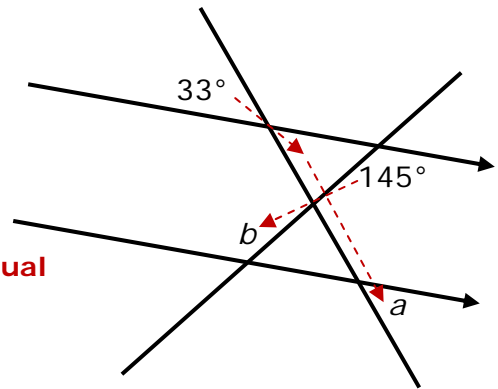
Angle $a = 33^\circ$

Reasons = **Vertically opposite angles are equal**

Corresponding on parallel lines are equal

Angle $b = 145^\circ$

Reason = **Alternating on parallel lines are equal**



2.

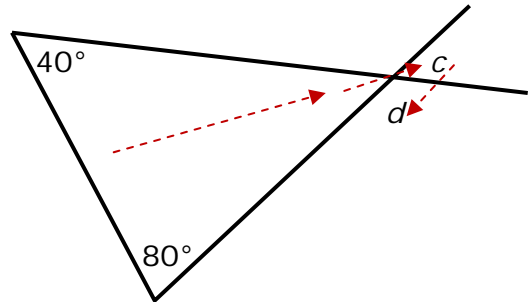
Angle $c = 60^\circ$

Reasons = **Angles in a triangle add to 180°**

Vertically opposite angles are equal

Angle $d = 120^\circ$

Reason = **Angles on a straight line add to 180°**



3.

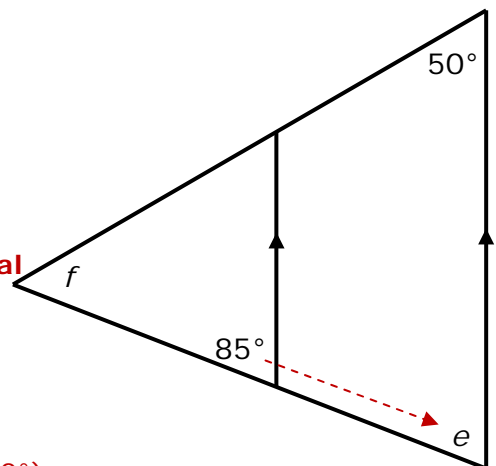
Angle $e = 85^\circ$

Reason = **Corresponding on parallel lines are equal**

Angle $f = 45^\circ$

Reason = **Angles in a triangle add to 180°**

(Triangles are not isosceles, angle e is not 50°)



4.

Angle $g = 43^\circ$

Reasons = **Base angles of an isosceles triangle are equal**

