

Reasoning and Problem Solving

Identify Angles

Developing

- 1a. $60^\circ - 25^\circ$; $30^\circ - 40^\circ$; $75^\circ - 10^\circ$.
2a. B is the odd one out as it is a right angle and the other angles are all acute.
3a. I can make 9 acute angles; 29° , 25° , 21° , 59° , 52° , 51° , 19° , 12° and 15° .

Expected

- 4a. $67^\circ - 19^\circ$; $23^\circ - 79^\circ$; $75^\circ - 14^\circ$.
5a. A is the odd one out as it is an obtuse angle and the others are all acute angles.
6a. I can only create acute angles; 37° , 35° , 34° , 73° , 75° , 74° , 53° , 57° , 54° , 43° , 47° , 45° .

Greater Depth

- 7a. $67^\circ + 22^\circ$, $23^\circ + 66^\circ$, $85^\circ + 4^\circ$
8a. A is the odd one out as it is an obtuse and the others are all acute.
9a. I can create the same amount for each; acute = 19° , 12° , 21° , 29°
obtuse = 91° , 92° , 99° , 129° .

Reasoning and Problem Solving

Identify Angles

Developing

- 1b. $20^\circ - 65^\circ$; $40^\circ - 40^\circ$; $50^\circ - 15^\circ$.
2b. A is the odd one out as it is an obtuse angle and all the other angles are acute.
3b. I can make 4 obtuse angles; 178° , 176° , 167° , and 168° .

Expected

- 4b. $33^\circ - 56^\circ$; $14^\circ - 66^\circ$; $5^\circ - 79^\circ$.
5b. D is the odd one out as it is an acute angle and the others are all obtuse.
6b. I can create more acute angles; acute = 81° , 89° , 86° , 18° , 19° , 16° , 68° , 61° , 69° ;
obtuse = 91° , 96° , 98° , 168° , 169° .

Greater Depth

- 7b. $33^\circ + 58^\circ$, $14^\circ + 77^\circ$, $5^\circ + 86^\circ$
8b. D is the odd one out as it is more than 45° . The other angles are all less than 45° .
9b. I can create more angles that are acute; acute = 24° , 28° , 21° , 42° , 48° , 41° , 82° , 84° , 81° , 12° , 14° , 18°
obtuse = 124° , 128° , 142° , 148°