**ANSWERS**

**Multiple choice**

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| **1.** | **Find the value of** $ x$ **in the figure below.**$$ x $$$$ 48°$$$ $ |
|  | **a.** $42°$ | **b.** $132°$ |
|  | **c.** $32°$ | **d.** $ 90°$ |

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| **2.** | **Which of the following statements is true?**$ R F$ $A$$ S D$  |
|  | **a.** $ ∠DSA and∠DSF $**are obtuse angles** | **b.** $∠DSF and∠RSA $**are acute angles** |
|  | **c.** $∠FSA and∠DSR $**are obtuse angles** | **d**. $∠RSA and∠DSR $**are acute angles** |

**3.** **Find the measure of each angle.**

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|  | $m∠ENH,m∠YNH, m∠HNR =?$https://lh6.googleusercontent.com/d3-Z8ZYWIAYnzZam0k-3jKFlLrIk1cWbXDKohgIE0AaQHE_iFku1j63EeRZeEY-lqgmCiTWhbR1Dx6UAwFE2JROY53czHWpWV_XkYEaJkzlPjiB76PB8K7So4h8ttc8730E1qeRl9oM$ R H$$$ Y$$$$ D N E$$ | $$m∠ENH=100$$**Obtuse angle**$$m∠YNH=\left|140-100\right|=40$$**Acute angle**$$m∠HNR=\left|100-70\right|=30$$**Acute angle** |

**4. Find the value of** $x$ **and then the indicated angle measures.**

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|  | **If** $m∠UFP=9x+30$**,** $ m∠PFT=x+10, $**what are** $m∠UFP and m∠PFT? $$$ P $$$ $$$ $$$$ \left(x+10\right)° \left(9x+30\right)°$$$ T F U$  | $m∠UFP=9x+30$, $$m∠PFT=x+10 $$$$m∠UFP=? m∠PFT=? $$$$m∠UFT=m∠UFP+m∠PFT$$$$180=9x+30+x+10 $$$$180=10x+40$$$$180-40=10x+40-40$$$$140=10x$$$$x=14$$$$m∠UFP=9x+30 m∠PFT=x+10 $$$$m∠UFP=9\*14+30 m∠PFT=14+10 $$$$m∠UFP=126+30 m∠PFT=24 $$$$m∠UFP=156 $$ |

**5. Find the indicated angle measures.**

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|  | **If** $ \vec{AN} $**bisects**$ ∠BAT$ **and** $m∠BAT=126$ **, find** $ m∠BAH$ **and** $ m∠BAH.$$ T H$$ $$ A B$  | $$m∠BAT=126 $$$$m∠BAH=? m∠HAT=? $$$$m∠BAT=m∠BAH+m∠HAT$$$$m∠BAH=m∠HAT$$$$m∠BAT=2\*m∠BAH$$$$m∠BAH=\frac{m∠BAT}{2}$$$$m∠BAH=\frac{126}{2}$$$$m∠BAH=63 $$$$m∠HAT=m∠BAH$$$$m∠HAT=63$$ |