UTP HIGH SCHOOLS

UTP Math Recommendation Form

Student Name

Gender Male ○ Female ◉

Applying for Grade 9 ○ 10 ○ 11 ○ 12 ○

Instructions:

For each problem, please CIRCLE the term that best describes your student's ability:

- **EASY** - Student is strong in this type of math subject, Does not needs instruction in this area.
- **CHALLENGING** - Student is learning this type of math presently, and has general ability. Some instruction needed in this area
- **DIFFICULT** - Student is beginning to learn this subject, but still needs practice and instruction
- **NOT LEARNED YET** - Student is weak in this type of math OR Student has not learned this math. Student needs thorough training and instruction in this area.

Please give your **honest** feedback. This form will be used to place your student in an appropriate math course. Exaggerating or misrepresenting the student's ability will only hurt their academics in their new school. By giving an accurate description of your student's ability, they can succeed in the correct math course. Thank you!

Section 1

Solve the following system of equations:

$$x + 2y = 5$$
$$2x + y = 4$$

For my student, this problem is:

○ EASY ○ CHALLENGING
○ DIFFICULT ○ NOT LEARNED YET

What is the solution to $2h + 8 > 3h - 6$?

1) $h < 14$ 3) $h > 14$

2) $h < \frac{14}{5}$ 4) $h > \frac{14}{5}$

For my student, this problem is:

○ EASY ○ CHALLENGING
○ DIFFICULT ○ NOT LEARNED YET

If $f(n) = (n-1)^2 + 3n,$ which statement is true?

1) $f(3) = -2$ 3) $f(3) = -2$

1) $f(3) = -2$ 4) $f(3) = -2$

For my student, this problem is:

○ EASY ○ CHALLENGING
○ DIFFICULT ○ NOT LEARNED YET

The function $f(x) = 3x^2 + 12x + 11$ can be written as:

1) $f(x) = (3x + 6)^2 - 25$ 3) $f(x) = 3(x + 6)^2 - 25$

2) $f(x) = 3(x + 2)^2 - 1$ 4) $f(x) = 3(x + 2)^2 + 7$

For my student, this problem is:

○ EASY ○ CHALLENGING
○ DIFFICULT ○ NOT LEARNED YET

Section 2

Determine the value of $\sum_{x=4}^{8} i^x$ in simplest $a+bi$ form.

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

Which expression has a value of $\frac{\sqrt{3}}{3}$?

1) $\cot 60^\circ$ 3) $\csc 30^\circ$

2) $\tan 60^\circ$ 4) $\sec 30^\circ$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

Solve the following system of equations:

$$-x-8y+3z=65$$
$$4x-4y-6z=58$$
$$6x+8y-3z=-45$$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

Find the domain of the function $f(x)=\sqrt{x+1}$

1) $x \geq -1$ 3) $x \leq 2$

2) $x \geq 1$ 4) $x \leq -1$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

The solutionn to the equation $x^2-8x+32=0$ is:

1) $3 \pm 3i$ 3) $2 \pm 4i$

2) $1 \pm 2i$ 4) $4 \pm 4i$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

Section 3

What is the equation of a circle with the following:

Center = $(5,-2)$ Radius = 3

1) $(x-5)^2+(y+2)^2=3$ 3) $(x-5)^2+(y+2)^2=9$

2) $(x+5)^2+(y-2)^2=3$ 4) $(x+5)^2+(y-2)^2=9$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

Which regular polygon has a minimum rotation of 45°?

1) octagon 3) decagon

2) hexagon 4) pentagon

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

The lines who equations are $2x+3y=4$ and $y=mx+6$ are perpendicular when m is:

1) $\frac{-3}{2}$ 3) $\frac{3}{2}$

2) $\frac{-2}{3}$ 4) $\frac{2}{3}$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

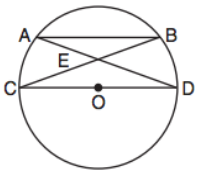
A gallon of paint will cover approximately 450 square feet. An artist wants to paint all the outside surfaces of a cube measuring 12 feet on each edge. What is the least number of gallons of paint he must buy to paint the cube?

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

In circle O shown below, $\overline{AB}$ P$\overline{CD}$.



Which statement is *false*?

1) $\overset{a}{AC} \cong \overset{a}{BD}$ 3) VABE : VCDE

2) $BE = CE$ 4) $\angle B \cong \angle C$

For my student, this problem is:

EASY CHALLENGING

DIFFICULT NOT LEARNED YET

Section 4

Which function has a vertical asymptote of $x = 2$

1) $\dfrac{3x-6}{x}$

2) $\dfrac{x^2-4}{x-2}$

3) $\dfrac{x-2}{x^2-8}$

4) $\dfrac{x}{x-2}$

For my student, this problem is:

- ◯ EASY
- ◯ CHALLENGING
- ◯ DIFFICULT
- ◯ NOT LEARNED YET

Determine the derivative of $y = (x-4)(x^2+5)$

For my student, this problem is:

- ◯ EASY
- ◯ CHALLENGING
- ◯ DIFFICULT
- ◯ NOT LEARNED YET

Determine the limit, if it exists, for:

$$\lim_{x \to 9} \frac{\sqrt{x}-3}{9-x}$$

For my student, this problem is:

- ◯ EASY
- ◯ CHALLENGING
- ◯ DIFFICULT
- ◯ NOT LEARNED YET

Write an equation of degree 3 for a polynomial $f(x)$ with two give zeros of: $2+i$, and 6

For my student, this problem is:

- ◯ EASY
- ◯ CHALLENGING
- ◯ DIFFICULT
- ◯ NOT LEARNED YET

Teacher Name

Teacher's Signature

Teacher Contact Info (email)

Date